

GRAIN & FEED JOURNALS

CONSOLIDATED

Vol. LXXXV. No. 1

Chicago, Ill., U. S. A., July 10, 1940

Price \$2.00 Per Year. 25 Cents Per Copy

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter

HD
9030
.1
672
v. 85
JULY-DEC
1940
WARE

Missouri-Illinois Grain Co.'s Elevator at Quincy, Ill., Loading Barges on the Mississippi River.

[For description see page 16]



Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them. The cost is only \$10 per year.

AMARILLO, TEXAS

Grain Exchange Members

Burrus Panhandle Elevators, public storage-mdsing.*
Great West Mill & Elevator Co., millers, grain dealers.*
Hardeman-King Co., grain seeds, feed mfrs.*
Henneman Grain & Seed Co., seeds and grain.*
Kearns Grain & Seed Co., grain-field seeds.*
Martin-Lane Grain Co., grain and public storage
Producers Grain Corp., federal bonded warehouse
Stene & Colley Grain Co., wholesale grain.

BALTIMORE, MD.

Chamber of Commerce Members

Beer & Co., Inc., E. H., grain, hay, seeds.*

BUFFALO, N. Y.

Corn Exchange Members

American Elvtr. & Grain Div., rears., shprs., consmts.*
Cargill, Incorporated, grain merchants.*
Eastern Grain Elvtr. Corp., Recvrs., shprs., elvtr. ops.*
Lewis Grain Corporation, consignments.*
McKillen, Inc., J. G., consignments.*
Wood Grain Corp., consignments, brokerage.*

CAIRO, ILL.

Hastings Co., Samuel, receivers and shippers.*

CEDAR RAPIDS, IOWA

Federal-North Iowa Grain Co., country run grain.*
Wilder Grain Co., grain merchants.*

CHAMPAIGN, ILL.

Sawyer & Rising, grain brokers, all markets

CHICAGO, ILL.

Board of Trade Members

Balley & Co., E. W., grain commission merchants.*
Bennett & Co., Jas. E., grain, provisions, stocks.*
Continental Grain Co., grain merchants.*
Holt & Co., Lowell, commission, grain and seeds.*
Lamson Bros. & Co., grain, stocks, provisions.*
Norris Grain Co., grain merchants.*
Quaker Oats Co., grain merchants.*

CLEVELAND, OHIO

The Bailey Cain Co., shpr. grain, mill'd, protein feeds.*
The Cleveland Grain Co., home office.*

COLUMBUS, OHIO

Cummings & McAllister, brokers grain, feed, oil.*
Dill Grain Co., L. J., mchts.-brokers, grain, beans, feeds.*

CINCINNATI, OHIO

The Early & Daniel Co., grain and feed service.*

DALLAS, TEXAS

Crouch Grain Co., J. C., buyers wheat, corn, oats.*

DECATUR, ILL.

Baldwin Elevator Co., grain merchants.*
Evans Elevator Co., grain, Chicago B. of T. Members.*

*Members Grain & Feed Dealers National Assn.

DENVER, COLO.

Grain Exchange Members

The Ady & Crowe Merc. Co., whlse, grain beans, feeds.
Intermountain Elevator Co., recvrs., shprs., consignmts.*
Fred M. Smith Grain Co., consignments.

DODGE CITY, KANS.

Dodge City Term. Elvtr. Co., bonded storage-mchdrs.*

ENID, OKLA.

Board of Trade Members

Enid Elevator Corp., operating Enid Terminal Elevator*
Fenquay Grain Co., optrs., country elvtrs., gr. mdsg.*
General Grain Co., term. elvtr., gr. merchants.
E. R. Humphrey Grain Co., grain merchants.*
Johnston Grain Co., W. B., wheat, coarse gr., fld. seeds.*
Salina Terminal Elvtr. Co., J. F. Chance, Mgr.

FORT WORTH, TEXAS

Grain and Cotton Exchange Members

Brackett Grain Co., brokerage, consignments.*
Carter Grain Co., C. M., brokerage and consignments.*
The Ft. Worth Elvrs. & Whsg. Co., public storage.*
Lone Star Elevators, public storage-merchandising.
Transit Gr. & Comm. Co., grain, feeds, seeds.*

HUTCHINSON, KAN.

Farmers Co-Operative Comm. Co., grain storage.
Salina Terminal Elvtr. Co., H. W. Poort, Mgr.

INDIANAPOLIS, IND.

Board of Trade Members

Cleveland Grain Co., grain commission.*

KANSAS CITY, MO.

Board of Trade Members

Davis-Noland-Merrill Grain Co., grain mchts.*
The Kansas Elevator Co., mlg. wheat, corn, oats, barley.*
Meservey-O'Sullivan Grain Co., gr. mchts., consgmts.*
Mid-Continent Grain Co., gen'l grain merchants.
Rahm Grain Co., J. E., cash commission merchants.*
Salina Terminal Elvtr. Co., R. W. McGeary, Mgr.
Scoular Bishop Grain Co., consignments.*
Simonds-Shields-Thels Grain Co., grain merchants.*

LOUISVILLE, KY.

Board of Trade Members

Zorn & Co., S., receivers and shippers.*

MEMPHIS, TENN.

Merchants Exchange Members

Buxton, E. E., broker and commission merchant.*

MILWAUKEE, WIS.

Grain & Stock Exchange Members

Stratton Grain Co., grain merchants.*

MINNEAPOLIS, MINN.

Chamber of Commerce Members

Bunge Elevator Corp., grain merchants.*
Cargill, Incorporated, milling wheat.*
Scroggins Grain Co., grain merchants.*

OMAHA, NEBR.

Grain Exchange Members

Udike Grain Corp., receivers & shippers.*

PEORIA, ILL.

Board of Trade Members

Bowen Grain Co., H. D., grain commission.*
Cole Grain Co., Geo. W., receivers and shippers.
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.

PITTSBURGH, PA.

Member Grain and Hay Exchange

Rogers & Co., Geo. E., receivers, shippers.*

PONTIAC, ILL.

Balbach, Paul A., grain buyers, all markets.

PORTLAND, ORE.

Kerr Gifford & Co., Inc., grain merchants.

ST. JOSEPH, MO.

Grain Exchange Members

Dannen Grain & Mfg. Co., grain mchts.-consignments.*
Stratton Grain Co., grain merchants.*

ST. LOUIS, MO.

Merchants Exchange Members

Anheuser-Busch, Inc., feed grains.*
Fuller-Woolbridge Com. Co., gr. & millets, all kinds.*
Langenberg Bros. Grain Co., grain commission.*
Mullally-Evans Co., everything in grain.*
Nanson Commission Co., grain commission.*
Teasdale Comm. Co., J. H., consignments solicited.*
Terminal Grain Co., grain, soybeans, consignments.*

SALINA, KANS.

Eberhardt-Simpson Grain Co., general mchts.*
Smoot Grain Co., wheat merchants.*

SIDNEY, OHIO

E. T. Custerborder & Co., carlot grain.
Wells Co., The J. E., wholesale grain.*

SIOUX CITY, IOWA

Grain Exchange Members

Flanley Grain Co., grain merchants.*

TOLEDO, OHIO

Board of Trade Members

De Vore & Co., H. W., consignments, futures, tr. buyers.
Rice Grain Co., "Oats Specialists."*

TOPEKA, KANSAS

Derby Grain Co., general grain merchants.*

WELLINGTON, KANS.

Wolcott & Lincoln, Inc., opers. Wellington Term. Elvtr.

WICHITA, KANS.

Board of Trade Members

Wichita Terminal Elvtr. Co., gen'l elvtr. business.*

WINCHESTER, IND.

Goodrich Bros. Co., wholesale grain and seeds.*

WINFIELD, KANS.

Daves & Daves Grain Co., milling wheat.

Grain & Feed Journals Consolidated, a merger of Grain Dealers Journal (Est. 1898), American Elevator & Grain Trade (Est. 1882), Grain World (Est. 1928), and Price-Current-Grain Reporter (Est. 1844). Published on the 2nd and 4th Wednesday of each month in the interest of progressive wholesalers in grain, feed, and field seed. 332 South La Salle Street, Chicago, Illinois, U. S. A. Price \$2.00 per year, 25c per copy. Entered as second class matter November 27, 1930, at the Post Office at Chicago, Ill., under the act of March 3, 1879. Vol. LXXXV. No. 1. July 10, 1940.

Use Universal Grain Code and Reduce Your Telegraph Tolls

Board of Trade
Members**CHICAGO**Board of Trade
Members**LAMSON BROS. & CO.**

2200 Board of Trade

Established 1874

Chicago, Ill.

*"66 years of continuous service in the grain trade."*GRAIN — BEANS
STOCKS — BONDS
COTTON — BUTTER
EGGS — PROVISIONS**E. W. BAILEY & CO.**
COMMISSION MERCHANTS

GRAIN, SEEDS AND PROVISIONS

1142-44 Board of Trade, CHICAGO

JAMES E. BENNETT & CO.

ESTABLISHED 1880

332 So. La Salle St., CHICAGO, ILL.

CONSIGNMENTS AND FUTURES ORDERS SOLICITED IN ALL PRINCIPAL MARKETS

KANSAS CITY
Board of TradeST. LOUIS
Merchants ExchangePEORIA
Board of TradeCAIRO
Board of TradeINDIANAPOLIS
Board of TradeMINNEAPOLIS
Chamber of Commerce**ASK FOR BIDS**Wheat — Corn — Barley
Rye — Oats — Soy Beans**Hedging by Dealing
in Grain Futures***By G. Wright Hoffman, Ph.D.*

A subject of much interest to all handlers of grain; not a fragmentary discussion but a presentation of the subject in a comprehensive and scientific manner.

This book, bound in cloth, 141 pages, includes, besides an extensive bibliography, chapters on: The Development of Futures Trading and the Practice of Hedging; The Theory of Hedging; Limitations Affecting Hedging; The Extent of Hedging; Extension of the Principle of Hedging.

This is a valuable book and will be worth to you many times its cost.

Price \$2.00 f. o. b. Chicago

GRAIN & FEED JOURNALS

Consolidated

332 S. La Salle St.

Chicago, Ill.

CONTINENTAL GRAIN COMPANY

332 SOUTH LA SALLE STREET, CHICAGO

PRODUCE EXCHANGE, NEW YORK

RECEIVERS — SHIPPERS — EXPORTERS

MEMBERS OF ALL LEADING COMMODITY EXCHANGES

TERMINAL ELEVATORS

CHICAGO • ST. LOUIS • PEORIA • KANSAS CITY • OMAHA

Harvest Is Now In Full Swing

Your high quality grain will find a ready market with—

THE QUAKER OATS COMPANY

Grain Dept., Chicago, Illinois

Buyers of Wheat, Oats, Barley, and Corn

To BUY or SELL**RENT or LEASE
an ELEVATOR**

Place an adv. in the "Wanted" or "For Sale" columns of the GRAIN & FEED JOURNALS, of Chicago. It will bring you quick returns.

Board of Trade
Members**PEORIA**Board of Trade
Members

LUKE Grain
Co., Inc.
Solicits Your Peoria Business
Consign Your Corn to Us
PEORIA, ILLINOIS

RECEIVERS GRAIN SHIPPERS
• W. W. DEWEY & SONS •
CONSIGN TO DEWEY
PEORIA

P. B. and C. C.
MILES
Est. 1875—Inc. 1910
PEORIA, ILLINOIS
Handling Grain on Commission
Our Special~

Chamber of Commerce
Members**MINNEAPOLIS**Chamber of Commerce
Members

SATISFACTORY SERVICE IN EVERY BRANCH of the GRAIN BUSINESS



Minneapolis and All Principal Terminal Markets

Personal Attention Plus Experienced Supervision Given Every
Consignment.**Clark's Car Load
Grain Tables**Eighth edition, extended to show bushels in
largest carloads, shows the following range of
reductions of pounds to bushels by fifty pound
breaks.

20,000	to 129,950 lbs.	to bushels of 32 lbs.
20,000	" 74,950 "	" " " 34 "
20,000	" 118,950 "	" " " 48 "
20,000	" 140,950 "	" " " 56 "
20,000	" 140,950 "	" " " 60 "

Pounds in red ink; bushels in black, 48 pages.
Linen ledger paper reinforced, bound in keratol
with marginal index. Weight, 8 oz.

Price \$2.50 at Chicago

GRAIN & FEED JOURNALS
Consolidated

332 So. La Salle St., Chicago

WHEAT

AND ALL OTHER GRAINS

*Any Grade—Any Quantity—Any Time***BUNGE ELEVATOR CORPORATION**
MINNEAPOLIS, MINN.Board of Trade
Members**KANSAS CITY**Board of Trade
Members**SIMONDS-SHIELDS-THEIS GRAIN CO.**
GRAIN MERCHANTS

ELEVATOR CAPACITY, 4,000,000 BUSHELS

Frank A. Theis, President

F. J. FitzPatrick, Vice President

F. L. Rosenbury, Secy-Treas.

DAVIS-NOLAND-MERRILL GRAIN CO.Board of Trade
Kansas City, Mo.Operating
SANTA FE ELEVATOR "A"
10,200,000 BUSHELS
Modern Fireproof Storage*Ask for our bids on Wheat, Corn, Oats, Rye and Barley for
shipment to Kansas City and the Gulf—Special Bin Storage
Furnished at Regular Storage Rates.***CIPHER CODES**We carry the following cipher codes in stock:
Universal Grain Code, board cover...\$1.00
Robinsons Cifer Code, leather..... 2.50
Dowling's Grain Code..... 3.00
Miller's Code (1936), cloth..... 2.00
Cross Telegraphic Cipher (10th edition) 4.00
Peerless Export Grain Code.....85.00
A. B. C. Code, 5th Ed., with sup.....20.00
Baltimore, Export Cable Code.....15.00
Bentley's Complete Phrase Code.....10.00
All prices are f. o. b. Chicago.**GRAIN & FEED JOURNALS**
Consolidated

332 S. La Salle St. Chicago, Ill.

Grain Exchange
Members**DENVER**Grain Exchange
Members**FRED M. SMITH GRAIN CO.**
Denver, Colo.Originators and merchandisers of milling
wheat and coarse grains.
200,000 bushels public storage.
Consignments Solicited.**Intermountain Elevator Company**and FORT MORGAN MILLS, INC. DENVER, COLORADO
Receivers, Shippers, and Elevator Operators**CONSIGNMENTS SOLICITED**Ample storage, constant stocks, and country connections enable us to give prompt,
efficient service, and dependable quality on coarse grains, and protein milling wheats.

Corn Exchange
Members**BUFFALO**Corn Exchange
Members

Wood Grain Corp.
CONSIGNMENTS—BROKERAGE
 BUFFALO, N. Y.

**You Can Sell
Your Elevator**

by advertising directly
to people who want
to buy, by using a
**Grain & Feed Journals
For Sale Ad**

American Elevator & Grain Division

Russell Miller Milling Company

RECEIVERS, SHIPPERS AND ELEVATOR OPERATORS
 CONSIGNMENTS SOLICITED

Our System of Terminal Elevators, enables us to give prompt service and reliable quality on coarse grains, durums and protein milling wheats.

**EASTERN GRAIN ELEVATOR
CORPORATION**

Receivers, Shippers, Elevator Operators
 CONSIGNMENTS SOLICITED

Lewis Grain Corp.

A good firm to consign to
 Corn—Oats—Soft Wheat—Barley
 BUFFALO NEW YORK

J. G. McKILLEN, INC.

RECEIVERS
 Consignments a Specialty
 BUFFALO NEW YORK

RECEIVERS, SHIPPERS AND BROKERS

E. H. BEER & CO., INC.

Successors to
 Chas. England & Co., Inc.
GRAIN—HAY—SEEDS
 Commission Merchants
 308-310 Chamber of Commerce, Baltimore

**LANGENBERG BROS. GRAIN
COMPANY**

Established 1877
 ST. LOUIS NEW ORLEANS

Nanson Commission Co.

Grain—Hay—Seeds
 202 Merchants Exchange Bldg.
 ST. LOUIS, MO.

Pay for 1 Get 5

TETRAFUME

1. Kills Weevil, Moths, Worms.
2. Reduces Temperature.
3. Reduces High Moisture Content.
4. Removes Musty Odors.
5. Removes Ground Odors.

It's safe and certain—proved so by thousands of users. Leaves no fumigation odor. Will not burn or explode. Costs less in long run.

DOUGLAS CHEMICAL AND SUPPLY COMPANY

GET FACTS! Send
 for Free Folder on
 Fumigation.

829 Southwest Blvd.
 KANSAS CITY, MO.



T-1

for 'Quality' mix



A 'super outfit—for
 'super quality mixing.
 Today's surest way to
 constantly maintain
 highest mixing stand-
 ards.

Four  in One

Electrified

'V-belt Drive

1940's Newest—Finest

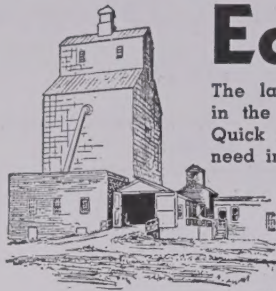
for 'Quantity' mix

Fast self-Loading—fast even-mix Mixing—fast
 packs-as-it-sacks Bag-off . . . Speediest, Simplest,
 Cheapest-to-use "Vertical."

Ask for Catalog S-165.

S. HOWES CO., Inc., Silver Creek, N. Y.

Grain Elevator Equipment



The largest and most complete stock in the country. Quality merchandise. Quick shipments. No matter what you need in the way of machinery or supplies, if it is used in a grain elevator or feed plant you can get it from us promptly and at prices that will save you money.

We Manufacture:

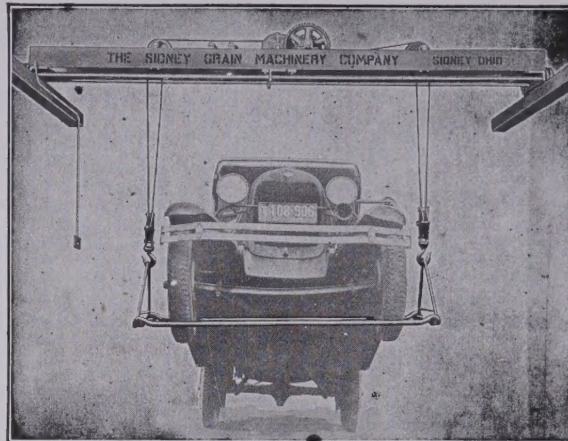
DIRECT-CONNECTED GEARED ELEVATOR HEAD DRIVES, AERO-FLEX TELESCOPING PNEUMATIC TRUCK DUMPS, ELECTRIC OVERHEAD TRAVELING TRUCK HOISTS, COMBINATION FEEDER, SCALPER AND MAGNETIC SEPARATOR, PNEUMATIC FEED BLOWERS AND COLLECTORS, VERTI-LIFT RADIAL DISTRIBUTORS AND SPOUTING, PULLEYS, SPROCKETS, GEARS, BEARINGS, CLUTCHES, ETC.

We Distribute:

Attrition Mills—Hammer Mills—Batch Mixers—Molasses Mixers—Corn Crushers—Corn Shellers—Corn Crackers and Graders—Waukesha Power Units—Grain Cleaners—Oat Hullers—Seed Treaters—Scales—Car Pullers—Air Compressors—Motors—Manlifts—Conveyors—Belt-ing—Cups—Rope—Cable—Chain—Dockage Equipment.

GENERAL CATALOG AND PRICES ON REQUEST

R. R. Howell Co.
MINNEAPOLIS, MINNESOTA



SIDNEY TRAVELING TRUCK DUMP

designed for your driveway
with
special geared motor unit and push button control.

**STURDY
SILENT
FAST**

Send for descriptive literature.

THE SIDNEY GRAIN MACHINERY COMPANY
SIDNEY, OHIO



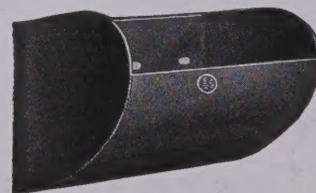
THE CALUMET

(Protected by U. S. & Foreign Patents)

Increased Capacity

Perfect Discharge

Superior Wearing Quality



We can also furnish these buckets in a new rustless, non-sparking metal for flour and soft feed. Less than one quarter the weight of steel and at a fraction of the price of standard stainless steel.

We handle a complete stock of Norway Flathead Bucket Bolts and Spring Washers

B. I. WELLER

SOLE OWNERS of the patent and SOLE Licensed Manufacturers in the U. S. under this patent.

220 W. Chicago Ave., East Chicago, Ind.

327 S. La Salle Street, Chicago, Ill.

THE STRONG-SCOTT MFG. CO., LTD.
Toronto WINNIPEG Calgary
Licensed Manufacturers for the Dominion of Canada

R. R. HOWELL & CO., Minneapolis, Minn.
Northwest Distributors



ALFRED C. GOETHEL CO.
MANUFACTURERS • ENGINEERS

FOR GRAIN ELEVATORS

2337 No. 31st St.

Milwaukee, Wis.



SKF
BALL BEARINGS

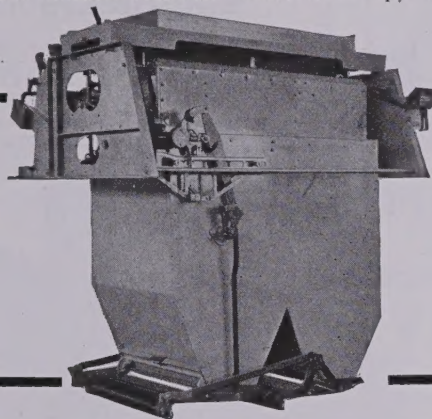
Preferred in the
Grain Elevator Industry
SKF INDUSTRIES, INC.
FRONT ST. & ERIE AVE.
PHILADELPHIA, PA.

DON'T LOSE PROFITS . . . BE ON THE SAFE SIDE!

You can't afford to take any chances on your weights—whether you weigh from trucks, or to cars and trucks.

Richardson Automatic Grain Scales give printed record of each lot of grain shipped or bought—are self-adjusting—give machine-precision accuracy—and save time, power and labor.

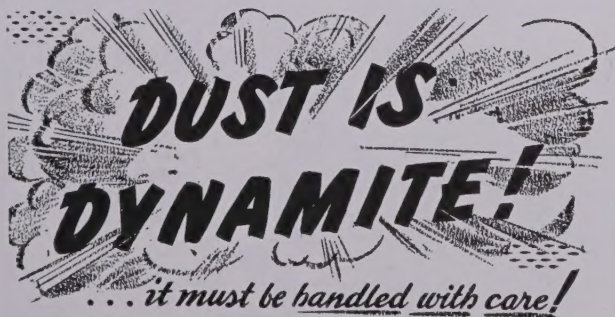
Catalog 1219-G tells how these substantial units are constructed, how they automatically compensate for changes in rate of flow and specific gravity, and many other interesting and valuable features. Write for a copy now.



RICHARDSON

Chicago Minneapolis Omaha Wichita San Francisco
RICHARDSON SCALE COMPANY, CLIFTON, N. J.

540



Dust can cost you more than a bad fire. Uncontrolled, it is a constant menace to your investment. We've made a study of dust control for years, and our findings are available to you at no obligation. Send for our illustrated booklet. Better yet, send for us!

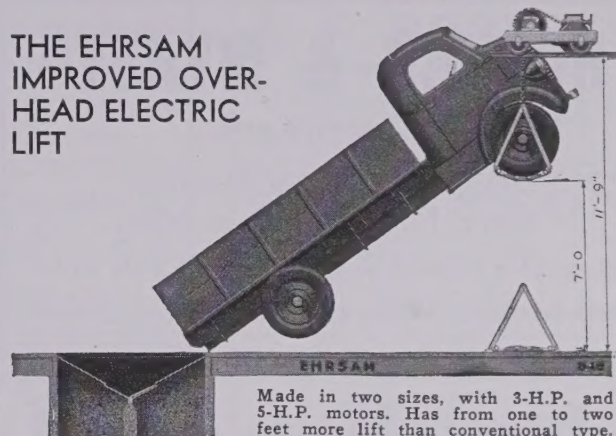


MILL MUTUAL FIRE PREVENTION BUREAU

401 West Madison Street • Chicago

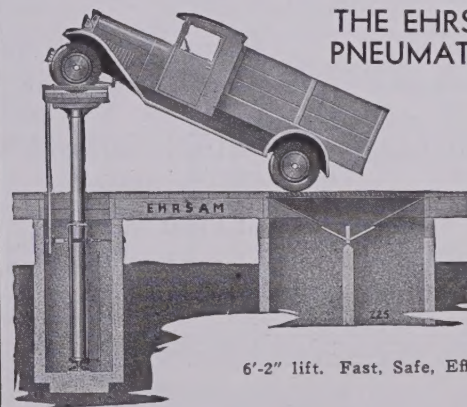
EHR SAM TRUCK LIFTS

THE EHR SAM IMPROVED OVER- HEAD ELECTRIC LIFT



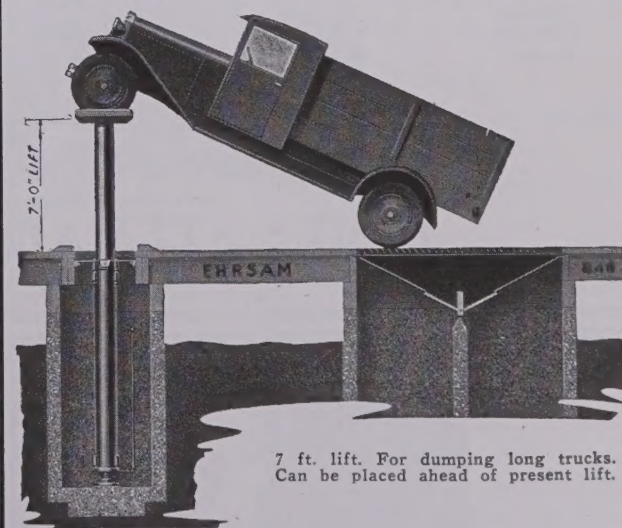
Made in two sizes, with 3-H.P. and 5-H.P. motors. Has from one to two feet more lift than conventional type.

THE EHR SAM STD. PNEUMATIC LIFT



6'-2" lift. Fast, Safe, Efficient.

THE EHR SAM STYLE B PNEUMATIC LIFT



7 ft. lift. For dumping long trucks. Can be placed ahead of present lift.

Write for new catalogue No. 439

THE J.B.EHR SAM & SONS MFG. CO.

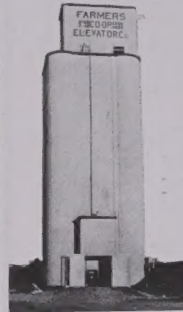
ENTERPRISE, KANSAS

W. H. Kent, 549 W. Washington Blvd., Chicago
Ralph K. Albert, 902 Southland Life Bldg., Dallas

GRAIN ELEVATOR BUILDERS**HORNER & WYATT***Engineers*Designers of Grain Elevators,
Flour Mills and Feed Mills

Consulting engineers to the milling and grain trade

470 BOARD OF TRADE KANSAS CITY, MO.

**CHALMERS & BORTON**Contractors
and
Engineers

HUTCHINSON, KANSAS

Jones - Hettelsater Construction Co.

Mutual Building — — Kansas City, Mo.

Designers and Builders

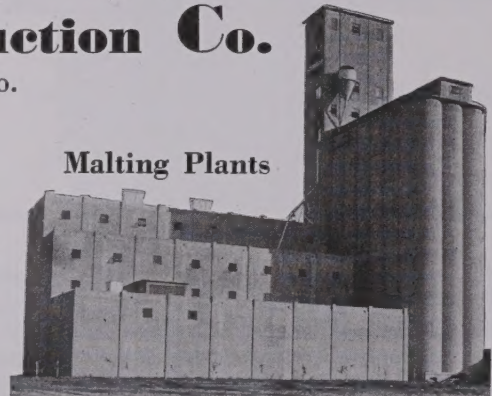
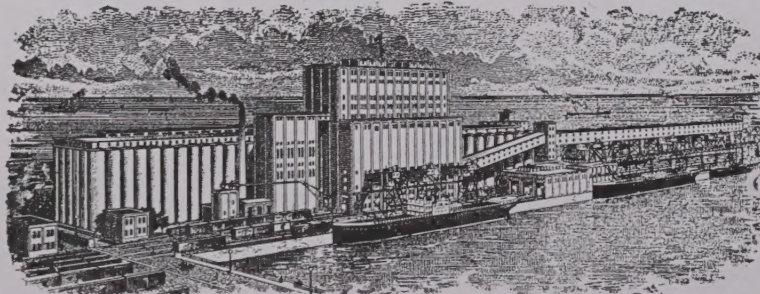
Grain Elevators

Feed and Flour Mills

Malting Plants

MILLER MALTING COMPANY

LOS ANGELES, CALIF.

Complete Malt Plant Including
Elevator—Kiln House—Germinating Compartments
Designed and constructed by us.Capacity
5,000,000
BushelsEquipped with
Four Stewart
Link-Belt
Grain Car
Unloaders

PENNSYLVANIA RAILROAD ELEVATOR AT BALTIMORE

JAMES STEWART CORPORATION

ENGINEERS AND CONTRACTORS

FISHER BUILDING—343 S. DEARBORN ST., CHICAGO, ILLINOIS

**Santa Fe Elevator "A"**

Kansas City, Kans.

Capacity
10,500,000 Bushels**JOHN S. METCALF CO.***Grain Elevator Engineers and Constructors*

111 W. Jackson Blvd.

460 St. Helen St., Montreal

837 W. Hastings St., Vancouver, B. C.

12-15 Dartmouth Street, London, England

GRAIN ELEVATOR BUILDERS

POLK SYSTEM CONCRETE STORAGES

POLK-GENUNG-POLK CO.
Fort Branch, Indiana
Designers — Contractors

A. Clemans Construction Co.

SOUTH SOLON, OHIO

Engineers Contractors
Fireproof Modern Grain Elevators

J. H. FISCH CO.

Elevator Builders and Movers
Barnesville, Minnesota

A. F. ROBERTS

Construction Co.
Designers and Builders of
Any Type Grain Elevators
Sabetha, Kansas

HOGENSON

Construction Co.
Designers and Builders
Elevators, Feed Mills, Warehouses
REMODELING
Corn Exchange Bldg. MINNEAPOLIS, MINN

Elevators & Feed Mills

designed, built or remodeled
to meet your individual
needs.

Write, wire or phone us
your requirements for ele-
vator or mill equipment.

Ernest Engineering Co.

Curtis & N. Quincy Sts.
Topeka, - - - Kansas

We are very well pleased with your
publication. We find it worth our while
to read it.—Greybull Elvtr. Co.

YOUR ELEVATOR

can be brought up-to-date for less than
it is costing you to operate it. Ask for
our recommendations and estimates on
modernizing your plant.

Reliance Construction Co.
Board of Trade Indianapolis, Ind.

FRIEDLINE

Designs and Builds Grain Mills, Elevators,
Warehouses, Special Machinery
FRED FRIEDLINE & SONS
Kentland, Indiana

YOUNGLOVE CONSTRUCTION CO.

DESIGNERS AND BUILDERS OF
GRAIN ELEVATORS
Feed and Soybean Plants
Repairing
201 Grain Exchange, Sioux City, Ia.

CONCRETE

CONSTRUCTION OF
Grain Elevators—Feed Mills—
Flour Mills—Coal Pockets
RYAN CONSTRUCTION CO.
503 Keeline Bldg. Omaha, Neb.

Ibberson Efficiency

Saves Money

Builders of: Grain Elevators
Feed Mills
Coal Plants

Repairing and Remodeling

T. E. IBBERSON CO.
Minneapolis Minnesota



GRAIN & FEED DUSTS Are DANGEROUS Protect Yourself With A DUPOR Double Filter RESPIRATOR

DUPOR NO. 4 for nuisance dusts has
"Original twins" filter construction!
Respirator is foldable, reversible—fits
any shaped face. Has approved face
cloth for comfort. Weighs but 4 oz.
Conversation Easy! Get the protection
you need—order a Sample Respirator
today!

H. S. COVER

1937 Chippewa St., South Bend, Ind.

\$1.50
SAMPLE
POSTPAID



Write for our
catalog.

Use A HALL DISTRIBUTOR

FOR

Safe, Economical and Speedy
Handling of all Grain.

BUILT

For a Life Time of constant
Heavy Service.

Reliable, always Ready and Easy
to Operate.

HALL DISTRIBUTOR COMPANY

1504 Grant St.

Omaha, Nebr.

Record of Cars Shipped

This double page form is designed especially for
country shippers in keeping a complete record of
each car of grain shipped from any station or to any
firm. On each double page are the following column
headings: Date Sold, Date Shipped, Car No., Initials,
To Whom Sold, Destination, Grain, Grade Sold,
Their Inspection, Discount, Amount Freight, Our
Weight, Bushels, Destination Bushels, Over, Short,
Price, Amount, Freight, Other Charges, Remarks.

The book is 9½ x 12 inches, and contains 160 pages of
ledger paper, 29 lines to each page, and has spaces for record-
ing the foregoing facts regarding 2320 carloads. It is well
bound in strong boards with karetol back and corners.

Order Form 385. Price, \$2.50.

GRAIN & FEED JOURNALS

Consolidated

332 So. La Salle St.

Chicago, Ill.

IN
MINNEAPOLIS

Since 1858

Famous dance bands play
nightly . . . Three Air Con-
ditioned restaurants . . .
600 rooms with bath . . .
New Drive-in Garage.

HOTEL NICOLLET

NEIL R. MESSICK, Manager

Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

ELEVATORS FOR SALE

GOOD ELEVATOR for sale; money maker; reason: ill health. Address 85N5, Grain & Feed Journals, Chicago.

TWO EASTERN NEBRASKA elevators for sale; located in good producing territories; priced to sell. Address 84L3, Grain & Feed Journals, Chicago, Ill.

ALBIN, WYOMING—15,000 bushel house; large dependable territory. Produces 300,000 to 500,000 bushels annually. Price \$6500—\$3000 cash, balance 1c per bushel. Sterling Home Realty Co., Denver, Colo.

SOUTHWESTERN INDIANA—Terminal elevator, steel and concrete, capacity 135,000 bus. track scale, brick warehouse, truck facilities, plenty of ground for expansion, excellent rate and distribution point. Address 84B5, Grain & Feed Journals, Chicago.

FOR SALE—10,000 bu. cribbed elevator and equipment; coal sheds, office building and dwelling, cob and fuel house, lumber shed. Bradish, Boone County, Nebraska. For further information write to Omaha Bank for Cooperatives, Farm Credit Bldg., Omaha, Nebr.

TO SETTLE ESTATE: The Geo. A. Lauf-fer Elevator for sale; located on C.&E.I. Ry Grant Park, Ill.; 50,000 bu. cribbed elevator and equipment, corn cribs, coal sheds, office and new Soweigh truck scale will be sold to highest bidder on Aug. 3, 1940, at one o'clock P. M. Good grain point. John C. Werner, Adm., Beecher, Illinois.

BARGAIN IF TAKEN AT ONCE—Some one is always looking for an elevator at a good grain point and reads these ads just like you're doing now, so if you wish to dispose of your present property, enlarge your present interests, or embark in the grain business, USE these columns to your best advantage just as others are doing. WE WILL assist you in the composition of copy free. We are in business to be of service to YOU. There is no wrong time to put an ad in the columns of the Journal. TRY IT.

ELEVATORS WANTED TO WRECK

WE PAY top prices for elevators to wreck. United Wrecking Co., Vermilion Grove, Ill.

FLOUR MILL & ELEVATOR FOR SALE

SOMERVILLE, N. J.—Flour and feed mill for sale; on main line Central Ry.; business established in 1885; sell account illness and close estate; mill fully equipped and running railway siding. Wm. H. H. Wyckoff Co., Somerville, New Jersey.

KANSAS Elevator practically sold after three insertions. Here's what the advertiser writes: "We enclose check for three insertions of our ad. We have had more than a dozen inquiries from our ad and believe that we will be able to effect a sale." This proves conclusively the value of a Journal Want-Ad.

SAMPLE ENVELOPES

SAMPLE ENVELOPES—SPEAR SAFETY—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4½x7 inches, \$2.35 per hundred, or 500, \$10.00 plus postage. Sample mailed on request. Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

Daily MARKET RECORD

A boon to the grain dealer who keeps a convenient, permanent record of daily market quotations for ready reference.

This book provides spaces for recording hourly quotations on Wheat, Corn, Oats, Rye, and Barley. Spaces for a week's markets on a sheet; sixty sheets in a book. Order Form CND 97-5, Price \$1, plus postage. Shipping Weight, 1 pound.

Grain & Feed Journals Consolidated

332 S. La Salle St. Chicago, Ill.

SITUATION WANTED

WANTED—Position as manager of grain elevator; experienced in grain, flour, feed and coal. Excellent references. Address 84L7, Grain & Feed Journals, Chicago.

MACHINES WANTED

WANTED—Second hand overhead Electric Truck Lift. Meriden Grain Co., Meriden, Minn.

WANTED—Used Electric Truck Lift; state make, age and price. Auburn Grain Co., Spencer, Indiana.

MOTORS—GENERATORS

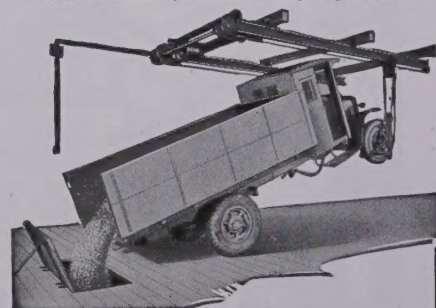
ELECTRICAL MACHINERY

Large stock of motors and generators, A.C. and D.C., new and rebuilt, at attractive prices. Special bargains in hammermill motors, 25 to 100 H.P., 1200 to 3600 R.P.M. Write for stock list and prices. Expert repair service. V. M. NUSSBAUM & CO., Fort Wayne, Indiana.

MOTOR-PUMPS: Guaranteed rebuilt electric motors, pumps, etc. Largest stock in Illinois, outside of Chicago. Will take your equipment in trade; also offer emergency motor repair and rewinding service. Distributors for Wagner and Peerless motors, specially adapted for farm and grain elevator application. We offer free engineering advice on your problems. Write us without obligation. New illustrated bulletin No. 23, just off the press, will be mailed on request. Rockford Power Machinery Co., 6th Ave. and 6th St., Rockford, Ill.

McMILLIN DUMPS

For Standard Truck, Heavy Duty & Semi-Trailer, Electrically Operated



Cut shows standard truck dump

A dump that fills all requirements. Capacity from smallest wagon to largest truck or semi-trailer. Dumps from any length vehicle into one dump door. By adding extension will dump into any number of doors. Operating connections at each door. Can be installed in almost any driveway. Installation simple and very reasonable. All parts of dump in plain view above driveway floor. Vehicles can be raised to any angle for dumping. Can be stopped and started as desired. Under complete control. All-steel power unit completely assembled. Substantially constructed. No delicate parts. SPEEDY, SAFE and SIMPLE in operation.

Address

L. J. McMILLIN

525 Board of Trade Bldg., Indianapolis, Indiana

Profit and Loss

GRAIN & FEED JOURNALS
CONSOLIDATED

332 So. La Salle St., Chicago, Ill.

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter.

Gentlemen:—In order that I may increase my profits and avoid losses by keeping well-posted, please send me the semi-monthly *Grain & Feed Journals Consolidated*. Enclosed find Two Dollars for my business magazine—one year.

Name of Firm.....

Capacity of Elevator

Post Office.....

..... bus.

State

Use Universal Grain Code and reduce your Tolls

MACHINES FOR SALE

CORN CUTTER & Grader—has motor—used very little. 84G5, Grain & Feed Jnls., Chicago.

MIXER. Richardson Scale, Head Pulleys, Boots Buckets & Feeders. Box 212, Reynolds, Ind.

ONE-HALF TON Horizontal Mixer, buhr corn cutter, hammer and roller mill. Box 175, Rushville, Indiana.

FEED MIXER—one ton—floor level feed—has motor—good as new. Write 84G7, Grain & Feed Journals, Chicago, Ill.

HAMMER MILL with 25-h.p. motor and all attachments. Priced to sell. Write 84G8, Grain & Feed Journals, Chicago, Ill.

FOR SALE—One G. E. Motor with starter, 50 h.p. 25 cycle, 3 phase; in good condition. Glen Avon Mills, Avon, New York.

AT A SACRIFICE—Complete 50 bbl. flour mill machinery. For particulars write Wm. Graunke Warehouse Co., Gardnersville, Nevada.

FEED MIXER for sale, has motor, and a late machine. Need space. Will sacrifice. Write 84G6, Grain & Feed Journals, Chicago, Ill.

FOR SALE—No. 1 L. H. Sidney Corn Shelter; in Al condition. Priced for quick sale. Address 85N6, Grain & Feed Jnls., Chicago.

FOR SALE—Double stand 9x18 rolls; 2 pair high 9x18 rolls (Ehram); 12x30 barley roll; Gauntt Draver 9 in. screw by 4 ft; 8 ft. conveyor; Beal steamer; Eureka 452 cleaner; 24 in. attrition mill with 2-20 h.p. motors, Monitor scourer No. 16; Daviston horiz. batch mixer. Summit Grain Co., Denver, Colo.

EXCEPTIONALLY good machines: No. 5 Jay Bee hammermill with 75 h.p. motor, tex-rope drive, governor controlled feeder; No. 3 Gruendler hammermill Whirl Beater type belt drive; 3,000 lb. Davis Batch mixer (new); McMillan molasses mixer; 2 Draver feeders (new); 100 ft. of 9" screw conveyor in box; size 10 Cyclone dust collector; all in perfect condition and priced to sell. Cliff Buzick, Bardstown, Ky.

Confirmation Blanks

Simple - Complete - Safe

If you would avoid trade disputes and differences, and prevent expensive errors, use triplicating confirmation blanks. You retain tissue copy, sign and send original and duplicate to customer. He signs and returns one and retains the other.

This places the entire burden for any misunderstanding of your intentions upon the other party and protects you against the expensive misinterpretation of your trades.

The use of these confirmations makes for safer business. Spaces are provided for recording all essential conditions of each trade.

Fifty confirmations in triplicate, bound with pressboard and wire stitched, size 5½x8". Order Form No. 6 CB. Weight, 9 oz. Price 75c; three copies \$1.95, plus postage.

Grain & Feed Journals
CONSOLIDATED

332 South La Salle St., Chicago, Ill.

SCALES FOR SALE**MOTOR TRUCK SCALES**

10½ ton, 16x9 ft., \$197.00—Larger sizes priced in proportion. 5 year guarantee. A few good repossessed scales. Expert repair work. Write for details. Bonded Scale Co., mfrs., Dept. GFJ, Columbus, Ohio.

100 TON R.A.E.A. 50 ft. long "10-60" track scale complete with structural steel and platform. Scale was shop overhauled last year. Now used for official grain weighing. For sale at tremendous sacrifice. Address 84L10, Grain & Feed Journals, Chicago.

THE WANTED-FOR SALE DEPARTMENT of GRAIN & FEED JOURNALS is a market place where buyer and seller, employer and employee, and those offering investments can meet to their mutual advantage and profit and it will pay every subscriber to give these columns a close study twice each month, because of the constantly changing variety of opportunities seeking your consideration.

WHEN YOU want field or grass seed, write us, and we will put you in communication with nearby dealers, who have what you seek. The service is free. Information Bureau, Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

INCREASED CAPACITIES---

A complete stock of buckets, leg belts, head pulleys, motors and head drives enables us to quote you promptly and exactly on the proper equipment to increase the elevating capacity of your elevator legs to any speed you may desire, yet keep power costs low.

Write us about your needs.
No obligation, of course.

WHITE★STAR★COMPANY
WICHITA, KANSAS

The Last Word in Clark's Direct Reduction Grain Tables

is a combination of our popular 7-card set, Form 3275 Spiral and our new Truck Loads to Bushels, Form 23,090 Spiral which reduce by 10 pound breaks any weight of grain from 600 to 23,090 pounds to bushels of 32, 48, 56, 60, 70 and 75 lbs.

Carefully printed from large clear type, using jet black ink, showing the bushels directly beside the weight of grain reduced and distinctly separated by rules and spaces so as to prevent errors in reading. The most practical, the most helpful grain reduction tables ever published. Their use will return their cost every day of the busy season in labor and time saved and errors prevented.

The spiral binding keeps the cards flat, and in regular sequence, and prevents the exposure of more than one grain at a time so it is easy to keep wide open the tables for the grain being received.

Both sets of tables are printed on heavy six ply tough check of durable quality, 11x13 inches with marginal index. Shipping weight, 3 lbs. You can get both sets described below for \$2.60, plus postage.

Direct Reduction Grain Tables										32
32 lbs. per bushel OATS										48
600	18.75	18.75	18.75	18.75	18.75	18.75	18.75	18.75	18.75	56
610	18.88	18.88	18.88	18.88	18.88	18.88	18.88	18.88	18.88	60
620	19.01	19.01	19.01	19.01	19.01	19.01	19.01	19.01	19.01	70
630	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	75
640	19.27	19.27	19.27	19.27	19.27	19.27	19.27	19.27	19.27	
650	19.40	19.40	19.40	19.40	19.40	19.40	19.40	19.40	19.40	
660	19.53	19.53	19.53	19.53	19.53	19.53	19.53	19.53	19.53	
670	19.66	19.66	19.66	19.66	19.66	19.66	19.66	19.66	19.66	
680	19.79	19.79	19.79	19.79	19.79	19.79	19.79	19.79	19.79	
690	19.92	19.92	19.92	19.92	19.92	19.92	19.92	19.92	19.92	
700	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05	
710	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	20.18	
720	20.31	20.31	20.31	20.31	20.31	20.31	20.31	20.31	20.31	
730	20.44	20.44	20.44	20.44	20.44	20.44	20.44	20.44	20.44	
740	20.57	20.57	20.57	20.57	20.57	20.57	20.57	20.57	20.57	
750	20.70	20.70	20.70	20.70	20.70	20.70	20.70	20.70	20.70	
760	20.83	20.83	20.83	20.83	20.83	20.83	20.83	20.83	20.83	
770	20.96	20.96	20.96	20.96	20.96	20.96	20.96	20.96	20.96	
780	21.09	21.09	21.09	21.09	21.09	21.09	21.09	21.09	21.09	
790	21.22	21.22	21.22	21.22	21.22	21.22	21.22	21.22	21.22	
800	21.35	21.35	21.35	21.35	21.35	21.35	21.35	21.35	21.35	
810	21.48	21.48	21.48	21.48	21.48	21.48	21.48	21.48	21.48	
820	21.61	21.61	21.61	21.61	21.61	21.61	21.61	21.61	21.61	
830	21.74	21.74	21.74	21.74	21.74	21.74	21.74	21.74	21.74	
840	21.87	21.87	21.87	21.87	21.87	21.87	21.87	21.87	21.87	
850	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	
860	22.13	22.13	22.13	22.13	22.13	22.13	22.13	22.13	22.13	
870	22.26	22.26	22.26	22.26	22.26	22.26	22.26	22.26	22.26	
880	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	
890	22.52	22.52	22.52	22.52	22.52	22.52	22.52	22.52	22.52	
900	22.65	22.65	22.65	22.65	22.65	22.65	22.65	22.65	22.65	
910	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	22.78	
920	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	
930	23.04	23.04	23.04	23.04	23.04	23.04	23.04	23.04	23.04	
940	23.17	23.17	23.17	23.17	23.17	23.17	23.17	23.17	23.17	
950	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	
960	23.43	23.43	23.43	23.43	23.43	23.43	23.43	23.43	23.43	
970	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	
980	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	
990	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	
1000	23.95	23.95	23.95	23.95	23.95	23.95	23.95	23.95	23.95	

990 pounds. Reductions are by 10 pound breaks into bushels of 32, 48, 56, 60, 70 and 75 lbs. Shipping weight, 2 lbs. Price, only \$1.50, plus postage. Order No. 23,090 Spiral.

A combination of Form 23,090 Spiral, with Form 3275 Spiral gives complete reduction of all grains specified in a range from 600 to 23,090 pounds. Both sets of tables now for only \$2.60, plus postage. Shipping weight 3 lbs.

Send all orders to the semi-monthly

Grain & Feed Journals

Consolidated

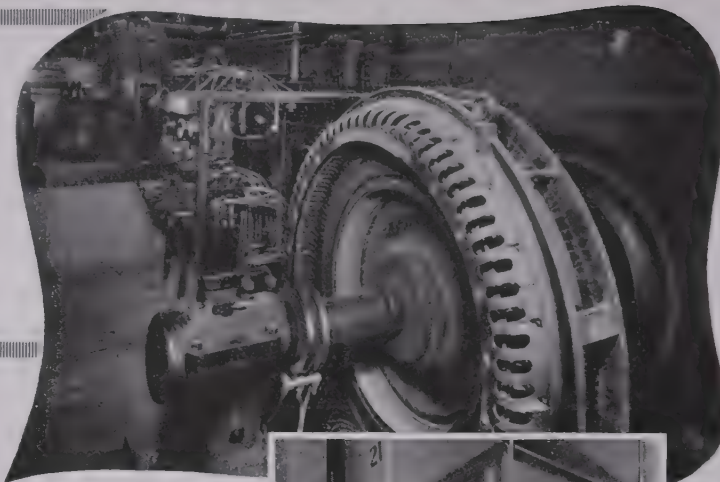
Headquarters—Books for Grain Dealers

332 S. La Salle St.

Chicago, Ill.

F-M MOTORS IN MILLING SERVICE

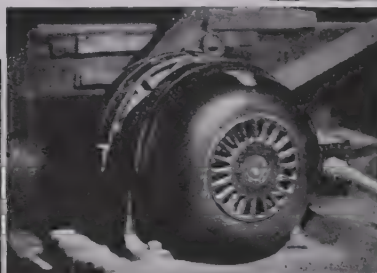
WHERE operating conditions are difficult—where motors must be far better than ordinary, Fairbanks-Morse Motors are daily proving their dependability, stamina, and safety. Underwriters' inspection labels can be supplied with F-M totally enclosed fan-cooled motors, qualifying them for duty in Class II Group G explosive dust atmospheres. For detailed information, write Fairbanks, Morse & Co., Dept. 37, 600 S. Michigan Ave., Chicago, Illinois. Branches and service stations throughout the United States and Canada.



Above—Two 500-h.p. pedestal-type F-M low-speed synchronous motors in Commander Milling Company mill at Minneapolis, Minn.



Above—An F-M 7 1/2-h.p. enclosed fan-cooled motor driving a feed mixer.



Left—Typical installation of a 10-h.p. totally enclosed, fan-cooled F-M motor.

7765-EA22:38

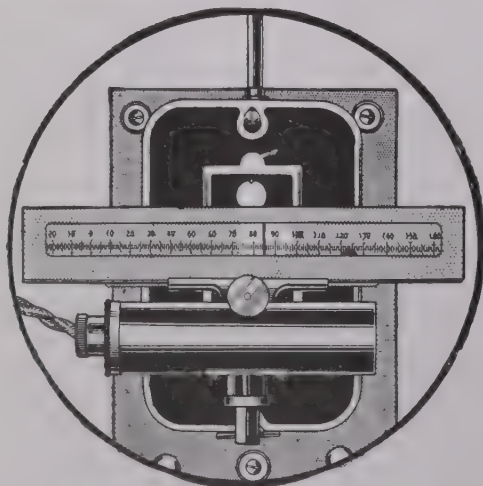
FAIRBANKS-MORSE

DIESEL ENGINES
PUMPS
ELECTRICAL MACHINERY
FAIRBANKS SCALES
RAILROAD EQUIPMENT

WATER SYSTEMS
WASHERS-IRONERS
FARM EQUIPMENT
STOKERS
AIR CONDITIONERS



Motors



NEW CROPS

Will Soon Be Ready for Storage!

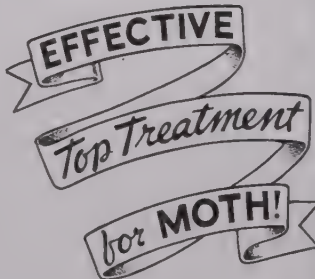
You can store this grain safely and economically by instantly checking its condition.

Use a ZELENY THERMOMETER SYSTEM!

May we quote on your requirements?

ZELENY THERMOMETER COMPANY

542 South Dearborn Street
CHICAGO ILLINOIS



No more fun for Mr. Moth when LARVACIDE is used for Bin Top Treatment • LARVACIDE is toxic to moth in all stages, including the egg • Sprinkle top of grain with quart or so, as directed in our Insect Control Program • This heavier-than-air gas will do a good job in the upper levels, killing the pests that cut down the yield • Dosage varies according to size and contents of the bin, complete directions being given in the LARVACIDE Program • Also works with Weevily grain, treated when turning or receiving • RODENTS are also taken care of with LARVACIDE • They die in the open; no carcass nuisance, and traces lingering in their retreats discourage rehabilitation. Write for that Program at once.

Larvacide
CHLORPICRIN

comes in cylinders, 25 to 180 lbs., also in 1 lb. Bottles, each in safety can, 6 and 12 to wooden case. Stocked in major cities.

INNIS, SPEIDEN & COMPANY

Established 1816
117 Liberty St., NEW YORK
CHICAGO • CLEVELAND
BOSTON • OMAHA
PHILADELPHIA

CUTS ACCIDENT RISK—Any powerful fumigant can be dangerous to humans also. LARVACIDE'S inseparable self-warning quality drives out all not protected by masks, even at far below the lethal concentration. Give your men this extra safeguard.

GRAIN & FEED JOURNALS

CONSOLIDATED
INCORPORATED

332 S. La Salle St., Chicago, Ill., U.S.A.
Charles S. Clark, Manager

A merger of
GRAIN DEALERS JOURNAL
Established 1898

**AMERICAN ELEVATOR &
GRAIN TRADE**
Established 1882

THE GRAIN WORLD
Established 1928

PRICE CURRENT - GRAIN REPORTER
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improving of grain, feeds and seeds.

SUBSCRIPTION RATES to United States, Canada and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, \$2.00; single copy current issue, 25c.

To Foreign Countries, prepaid, one year, \$3.00.

THE ADVERTISING value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, ILL., JULY 10, 1940

A CAR SHORTAGE is in the offing the third quarter of 1940, for the first time in years. If the rail carriers are to pull thru they must have the full co-operation of shippers in ordering, prompt loading and routing cars.

WE PUBLISH the definite results of many feeding tests patiently conducted by experts trained in the exacting details of making accurate tests so all who read may profit from the splendid work of our many agricultural experiment stations.

BUROCRATIC regulation of truck drivers leaves some employers in doubt where they stand. One Commission regulates the number of hours worked per week and per day, and another, the Wage and Hour Division, regulates their pay. The National and state grain dealers' ass'ns are performing an excellent service in endeavoring to obtain for members the seasonal exemptions and definite interpretations of the law, the latest of which is published elsewhere.

COUNTRY elevators overloaded with stocks of grain are beginning to burst out their sides because of weak construction, and this is just the beginning of the movement of a new crop, all of which warns elevator operators to watch the walls of their storage bins and empty them when they begin to creak.

THANKS to group or local meetings, grain dealers throughout well organized territory are marketing grain more efficiently, with less friction and greater harmony. Unfortunate indeed are the buyers in unorganized territory who find it difficult to pursue the pleasing policy of live and let live.

"NECESSITY is the mother of invention" never was truer than in the case of the Kansas dealers, one of whom built an elevator in sections to be assembled later, and another who devised a dump and loader for cars that about doubled his handling capacity for temporary use during the harvest rush.

THE FARMER has not yet fallen to as low an estate as has the member of the grain exchange, who has seen the value of his membership in the Board of Trade drop from \$65,000 in 1929 to \$1,000 yesterday. And if the merchant buys a membership he pays \$250 in dues annually and an assessment of \$150, for the privilege of submitting to the burdensome regulations of the Commodity Exchange Act.

UNIFORM contracts effect so great a saving in wire expense in negotiating purchases and sales that the trade will view with disapproval the ruling by the Federal Trade Commission that the bean jobbers of Michigan shall not "establish and use a uniform contract embodying terms and conditions of sale for buying and selling beans." Unless the contracts are uniform there is no basis to determine whether bids and offers are competitive in price. Thus the order of the Commission tends to prevent the free competition the Act is intended to promote.

LOW ROOFS of country grain elevator offices attract such intense heat on summer days of high temperature that farsighted grain dealers are raising the roofs and providing a ventilated garret over their working rooms in hope of having more comfortable quarters in which to conduct business. The aerating equipment of the grain office at Emma and Sweet Springs, Missouri, described elsewhere in this number are typical of many other installations which we have described previously. Many country elevator offices are little cooler than a melting pot and their continued use without alteration is inexcusable. The grain merchant and his customers are entitled to more comfortable quarters in which to transact business.

OAT HULLS, considered worthless, are reported by the Western Washington Experiment Station to control cannibalism and to improve the quality of fathens of poultry, which should be suggestive to manufacturers of feed, who are in position to add to the poultry ration the hull fiber obtained by dilute acid digestion of oat hulls.

PILING BAGS of grain, fertilizer, feed or any other heavy granular material about a warehouse needs cautious supervision as is proved by frequent reports of collapsing piles published in our news columns. One man working in an Iowa warehouse was recently buried in a pile of heavy bagged meal and suffocated before a dozen men could uncover him, although no bones were broken. If you must erect high piles of bagged material, then build the pile so that it will not collapse and endanger the lives of yourself or fellow workers.

HEAVILY LADEN trucks cannot safely be driven upon an old style small capacity scale. Frequent reports of the wrecking of such scales by heavily laden trucks appear in our news column, as a warning to other owners of small scales, against their continued use without carrying insurance against accidents to customers driving heavily laden trucks. Some elevator operators post large signs in entrance to driveway warning farmers against driving on scales or through driveway with trucks carrying excessive loads. Such warning signs may protect the scales for a time, but will not reimburse farmer for the death of his wife or son through the collapse of an obsolete scale. Insuring scale owner against damage suits resulting from wrecking of old scale is not prohibitive in cost, but the accident insurance policy will not protect the grain buyer against overweights in his receipts.

IN A COMPETING territory of Kansas, grain buyers discovered marked discrepancies in their tests made on the same samples of grain so had their testing kettles sent to the manufacturers with the result that several of the testing kettles were found to be working against their owners. Inaccurate testing kettles or scales are so expensive that no grain buyer depending upon them for determining test weight or total weight can afford to continue their use. Years ago a defect was disclosed by a buyer who sent in his kettle for checking when all he needed to do was to look at the bottom of his kettle and he would have learned the cause of his loss. After each time he used his testing kettle, he dropped the beam and the heavy poise into the kettle, thus causing a depression in the middle of the bottom of kettle to his great cost. All kettle fulls weighed more because of kettle's increased capacity.

Manlift Failures

The worn out cable on a manlift in an Illinois elevator broke recently and dropped the cage and the workman forty feet. Overloading any passenger elevator which is designed only to carry one or two men is never excusable, but if the lift must be used as a freight elevator, extra caution should be exercised to make sure that the cable is equal to carrying the load forced upon it. Breaking a couple of ankles is far more painful, far more expensive than a new cable and no elevator owner is willing to jeopardize the limbs of his employees for so small a probable saving.

Another serious manlift accident occurred in an Iowa elevator recently when the local manager put on the brake and stepped off the platform, but as soon as he did step off the brake gave way and his arm was trapped by the falling car and badly lacerated.

Manlift brakes which cannot be depended up to control the movements of the manlift cage should be quickly discarded. So many improvements in elevator manlifts have been perfected during recent years, the continued use of worn out, obsolete equipment should not be tolerated by anyone interested.

Encourage Farmers to Speculate in Cash Wheat

Notwithstanding the United States carry-over of old wheat July 1st aggregated close to 300,000,000 bushels, the A.A.A. is encouraging farmers to speculate in cash wheat by lending 77c per bushel on No. 2 Hard. If the farmer sells his wheat at the prevailing market price, he gets cash for the full weight and pays his bills. If he stores and borrows 77c per bushel, he greatly increases his liabilities and pays dearly for his loan because his stored grain is likely to depress the market value of all wheat more than any profit he can realize from speculating in the cash article.

The carry over in both United States and Canada is unusually large and is sure to exercise a depressing influence on market values unless the United States spring wheat section and Canada both suffer a marked shrinkage in their present crop prospects. Reports from many markets are that a large percentage of the early receipts of new wheat are stored for C.C.C. loans. No doubt, this will improve the demand for free wheat, temporarily, but eventually the large stored stocks will help to depress the market.

If anyone of experience in the wheat business has discovered how piling surplus stocks up in the public show windows helps to boost prices for the farmer, we have yet to learn of it. The only way speculators in any commodity have ever profited by holding a large quantity

has been by hiding their holdings and this seems to be foreign to the established policies of the federal owners of wheat.

Loans on Old Sealed Corn Are Called

The present corn crop prospect seems to have filled the AAA with fears and misgivings, so it has offered farmers having sealed corn of the crops of 1937 and 1938 on their farms, and covered by a CCC loan, 58c a bushel to redeem their loans and empty the cribs so that they can store the 1940 crop now in the making. Those who do redeem their loans will be allowed a storage charge of 7c a bushel provided nothing was advanced for additional storage at the time their loans were extended in the fall of 1939.

In other words, the government will take a loss of \$13,500,000 on corn of the 1937 and 1938 corn storage providing the farmers who borrowed money from the government on these crops will pay up the loan and release the sealed corn. The sealed corn of these two crops now amounts to 150,000,000 bushels, and will exercise quite a depressing influence on cash markets unless it is marketed and passed on to processors and consumers. The smaller the supply of corn in the public show windows when the new crop starts to market, the easier will it be for the friends of corn to support the market price.

Giving Calls Without Charge

Selling grain or grain products for distant delivery with price guaranteed against market decline is one of the hazardous practices saddled upon the trade by brokers or salesmen who are obsessed with an excessive ambition to accumulate a large stock of unfilled orders. If any merchant has ever developed a safe plan for assuming the market hazards of his customers, then he has not had sufficient courage to disclose his plan to the trade.

The selling of grain or grain products for delivery sixty, ninety or even one hundred and twenty days from date of sale should not be practiced by any cautious merchant. Buyers in organized markets who desire a call good for any old date invariably pay a handsome premium for the trade. Since the days when option trading was first inaugurated the traders have been assessed for every trade in puts and calls and there is no excuse for giving buyers of any commodity the privilege of calling for delivery of a specific amount on a distant date.

If brokers or salesmen are unable to book orders for short terms, then the services of other salesmen are greatly needed by the merchant.

The Selection of Desirable Hybrid Seed

Grain dealers of the corn belt who handle field seeds in the hope of helping their farmer patrons to greater yields of better grain are beginning to recognize the necessity of handling the hybrid which is best adapted to the soil and climate of dealers' territory.

In telling of the merits of the different hybrids and results of planting early varieties in different sections of the Hoosier State, Purdue University's associate professor in agronomy, at the mid-summer meeting of the Indiana Association, told of the planting of hybrids of superior characteristics in the northern part of the state and gaining a yield of eight bushels per acre over leading open-pollinated varieties, while the same seed planted in the southern part of the state produced seven bushels less per acre than leading open-pollinated varieties.

The careful selection of the hybrid best suited to the soil and climate of any dealer's territory insures larger yields and better grain for the farmers as well as for the shippers so the more vigilance exercised by the dealers in selecting field seeds for their farmer patrons, the more profitable will corn growing be for the farmer and the elevator operator.

New Attack on Dust Explosion Problem

The explosion tests that have been inaugurated by the Corn Industries Research Foundation and the Underwriters Laboratories as reported elsewhere are the first serious effort for many years past to increase our knowledge of the phenomena of dust explosions.

Prior work has led us to the point where the thing to be desired is a dust-free atmosphere in the grain elevator or mill. Altho this has been generally known for several years we still have explosions.

The new facts already developed by tests under the auspices of the Foundation are startling. The experimenters are earnestly seeking explanations of what, in the absence of knowledge, seems to be a freakish behavior of dust explosions.

By an analysis of the phenomena the investigators hope to prevent propagation of the explosion to a distance; and, by confining the generation of high gaseous pressures to the point of origin, to localize the damage.

The experimenters invite suggestions from others and will publish their findings that others may carry on where they leave off. Thru the generosity of a large industrial concern they have been given the use of a large building in which the conditions in actual practice may be simulated.

Seasonal Exemption for Grain Elevators

The National Grain Trade Council has petitioned the Wage and Hour Division for allowance to grain elevators of the seasonal exemption.

A ruling is expected that if the industry can prove over 50 per cent of its receiving and storage business is handled during 14 weeks it will be given the seasonal exemption allowing 56 hours of labor per week without overtime.

This will afford relief to grain handling establishments having eight or more employees.

Rectifier to Replace Grain-Tester Dry Batteries

Invention of a constant voltage rectifier circuit to replace dry batteries in the operation of electric grain moisture testers, and assignment of the patent to the Secretary of Agriculture has been announced by the Agricultural Marketing Service.

The new unit is designed for use with electric grain moisture testers requiring 90 volts for their operation, wherever ordinary lighting current of 100 to 120 volts is available. Advantages of the invention are that it does not require transformers, auxiliary batteries or other parts heretofore considered necessary in other types of rectifier. The device can be used on both direct and alternating currents, and the only parts which ordinarily need replacement over a period of years are two inexpensive radio tubes.

Patent No. 2,201,979 covering the rectifier circuit was granted May 28, 1940, to Alfred Christie of the Agricultural Marketing Service. Assignment of the patent to the Secretary of Agriculture makes it possible to license commercial firms for the manufacture of the device, and it may be used by the Government without the payment of royalties.

Loans on Corn Made Redeemable at 58 Cents

The Department of Agriculture announced July 5 that farmers may redeem their loans on farm-stored 1937 and 1938 corn at 58 cents per bushel between July 5 and Oct. 1, 1940.

This action, made possible when the Commodity Credit Corporation adjusted 1937 and 1938 corn loan redemption values from about 67 cents to 58 cents a bushel, places stored corn of the last three crops on virtually the same redemption basis.

Henry A. Wallace, Secretary of Agriculture, said: "Redemption of 1937 and 1938 corn at approximately the same rate as that prevailing for 1939 corn is in accordance with the established policy of not selling corn locally for less than the loan value plus accrued charges for the current crop."

Many corn loan borrowers prefer to repay their loans on 1937 and 1938 corn and retain their 1939 corn under seal but have been discouraged from doing so by the fact that accrued charges and the loan against 1937 and 1938 corn amount to about 67 cents per bushel, while accrued charges and the loan against 1939 corn amount to only about 58 cents per bushel. By this action the government loses about 9c per bushel.

Farmers who redeem their 1937 and 1938 loan corn will be paid a storage allowance of 7c per bushel for 1939-40 storage in case the allowance was not advanced to them for constructing additional storage facilities at the time they extended their loans last fall. Under original loan extension terms, this storage allowance was to have been paid only to farmers who delivered corn to the Corporation in settlement of loans at the close of the loan period.

Extended loans on both 1937 and 1938 corn will mature Aug. 1, 1940. Under terms of the extension farmers agreed to provide storage on their farms until Oct. 1, 1940.

About 15,000,000 bus. of 1937 corn and about 135,000,000 bus. of 1938 corn were resealed on farms under corn loan extensions last fall.

Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other merchants from the same occupation. You can not afford to pass up these opportunities to cultivate friendly relations and profit by the experience and study of others.

Aug. 2, 3. Indiana Wholesale Seed Dealers Ass'n, French Lick, Ind.

Aug. 15, 16. New York State Hay & Grain Dealers Ass'n, Syracuse, N. Y.

Aug. 26, 27. National Hay Ass'n, Indianapolis, Ind.

Sept. 26, 27, 28. Pennsylvania Millers & Feed Dealers Ass'n, Atlantic City, N. J.

Oct. 10, 11, 12. Southern Mixed Feed Manufacturers Ass'n and Georgia Feed Manufacturers Ass'n, Athens, Ga.

Oct. 14, 15. Grain & Feed Dealers National Ass'n, 44th annual, Brown Hotel, Louisville, Ky.

June 9, 10, 11, 1941—Society of Grain Elevator Superintendents, Nicollet Hotel, Minneapolis, Minn.

Interesting Routes to Louisville Convention

Members of the Grain and Feed Dealers National Assn. who plan to motor to the annual meeting in Louisville, Ky., on Oct. 14-15, are able to combine a convention trip with an unusual sight-seeing trip, says Rees Dickson, Director and Chairman of the Host Committee.

"Few trips offer so many sight-seeing advantages," he says. "Near to Louisville is the old Rowan homestead, 'My Old Kentucky Home,' now a State shrine. Also a short drive from Louisville is the log cabin in which Abraham Lincoln was born; the area rich in scenes connected with the boyhood of Lincoln.

"Near Louisville, at Bardstown, Ky., is St. Joseph's church with its famous paintings, gifts of Louis Phillips of France, who spent part of his exile near this spot. Another Kentucky place of natural wonder is the Mammoth Cave, with its 150 miles of charted passages.

"Also here in Kentucky is the famous Bluegrass region, where world famous thoroughbreds are raised. Louisville itself is the city of the famous Churchill Downs race track, the scene of the annual Kentucky Derby.

"Visitors at the 1940 convention in Louisville will have plenty of entertainment. On the first evening our convention members will be guests at one of Kentucky's famous horse shows, where some of the finest saddle stock of the State will be shown. There will be additional entertainment events, for both men and women."

Mr. Dickson adds that a large attendance is expected at the Louisville convention this fall. Large groups are being formed in the Ohio River States for group attendance, and it is believed that the attendance at the convention from Southern States will be the largest in a number of years.

Broke the Record

Grain & Feed Journals: We broke the record here when we received 803 loads of grain in one day and loaded out 67 transport trucks and 12 box cars, all in the same day.—F. E. Grim, mgr. Farmers Elevator & Co-operative Ass'n, Hennessey, Okla.

Breach of Contract to Deliver Seed

The Supreme Court of Indiana on Feb. 10, 1940, reversed the decision of the Noble Circuit Court in the suit by Klinger Mills, Inc., of Butler, Pa., against Abe N. Wertheimer and others of Ligonier, Ind., to recover \$1,421.69 damages for failure to deliver a carload of grass seeds on contract.

Plaintiff Klinger Mills presented in evidence a bill-head of Wertheimer describing the seed as 100 bags full timothy at \$1.59 per bu.; 4 bags white blossom S. Clo. at \$3.20 per bu.; 4 bags yellow blossom S. Clo., \$3.25 per bu.; 70 bags medium clover, \$11.10 per bu.; 30 bags Mam. Clo., \$11.10 per bu.; 5 1-bu. bags Idaho blue tag Grimm, \$13.75 per bu.; 2 bags common Idaho alfalfa, \$10.50 per bu.; and 12 1-bu. bags white clover, 24c per lb., signed by one of the Wertheimers as partner.

The lower court gave judgment for plaintiffs, Klinger Mills; but the Wertheimers took an appeal, taking refuge under the Indiana statute of frauds, under which a suit can not be maintained unless some note or memorandum in writing of contract was signed by the party to be charged when the amount exceeded \$500, and were granted a reversal by the Supreme Court on the ground the statement on the bill-head failed to indicate how many bushels went to a bag. The court said:

The written memorandum described the quantity of the seed in terms of "bags" and stated the price per bushel. Counsel for appellee contends that it was unnecessary that the written contract state the quantity of the various kinds of seed in bushels because the number of bushels contained in a "bag" of seed is common knowledge.

The evidence not only failed to state the number of bushels contained in the various bags, but also failed to show any common usage or custom by which the use of the word "bag" in a seed order designated a definite number of bushels. On page 17 of the appellee's brief there is this statement: "It is common knowledge known by everyone who has any use for clover seed, that a bag of clover seed contains 120 lbs. It was therefore not necessary for appellee to prove, or offer to prove, that a bag of clover seed contained 2 bushels, because anyone with common knowledge understands full well what is meant by a bag of clover seed, particularly farmers, who composed the jury that tried this case."

This statement is in direct conflict with the complaint herein. In writing the complaint, counsel for appellee apparently thought it necessary to specify the number of bushels to be contained in the various bags used.

It is to be noted that while the bags of timothy seed are alleged to contain 3 bushels, the bags of the other varieties of seeds are alleged to contain various amounts, none of them containing 2 bushels, the amount which the appellee insists is so fixed by custom that it is a matter of common knowledge. In the absence of any evidence showing a usage or custom by which the word "bag," when used in a contract for the sale of seed, designates a definite quantity, we are constrained to hold that the written contract, on which the appellee depends, was fatally defective in failing to specify in writing the quantity of the seed of each kind to be sold. —25 N. E. Rep. (2d) 246.

Kansas City, Mo.—A meeting called by the Millers National Federation officials of 17 railroads at this city June 26 considered ways of reducing the amount of weevil trouble caused by infestation from freight cars.

The Board of Tax Appeals has reversed its earlier ruling that losses above \$2,000 from hedging transactions could not be deducted for income tax purposes. On appeal by the Farmers & Ginners Oil Co. the Board now holds that hedging losses are deductible in full.

Quincy Barge Loading Elevator Has Three Units

The barge loading elevator of the Missouri-Illinois Grain Co. on the Mississippi river at Quincy, Ill., has three separate parts. These are a receiving, shelling and cleaning unit, a storage unit, and a barge loading tower, all built by Eikenberry Construction Co.

THE RECEIVING and handling unit is a 40x30 ft. frame structure incorporating a 14 ft. wide driveway, an office, and a two-story cleaning and shelling section.

In the driveway is the 36 ft. deck of a Soweigh 20 ton truck scale, a latest type Webster overhead traveling truck lift hung from heavy I beams, and a 300 bu., grate-covered receiving pit. Under the receiving pit is a Western shaker feeder to speed up the movement of ear corn as well as small grains into the boot of the single receiving leg.

The receiving leg has 14x8 inch Calumet buckets to elevate ear corn and small grains with equal facility. This is driven by a 7½ h.p. geared motor.

A turnhead in the cupola directs small grains and shelled corn into a spout that by-passes the shelling and cleaning machinery to reach a 12 inch screw conveyor that passes it to the leg in the loading tower. Ear corn is dropped into the throat of a 2500 bu. Western sheller on the second floor of the shelling and cleaning section, from which shelled corn and cobs drain together to a 2500 bu. Western gyrating cleaner on the first floor. From this cleaner the cobs are conveyed to a cob pile outside, while the cleaned shelled corn drains into the screw conveyor to be conveyed to the elevating and loading tower. About 80% of the corn received is ear corn.

THE LOADING TOWER is an 8x8 ft. frame structure 80 ft. high that sets on a solid concrete pier close to the edge of the river, so close that the pier is partially submerged during periods of high water.

In this tower is an elevating leg, driven by a 7½ h. p. geared motor, and carrying 5x6 inch Calumet buckets to elevate 2500 bus. per hour. Grain is poured into the boot of this leg from the receiving unit, and elevated to a Webster distributor at the top of the tower, where it drains thru spouting to the two bins in an adjacent storage unit, or thru a 10 bu. Richardson automatic scale into a dock type loading spout that directs it into the holds of the barges being loaded.

THE STORAGE unit is a 20x10 ft., two-bin, cribbed and ironclad structure. It is filled thru spouting at the top from the loading tower, and its hopper bottomed bins drain into the boot of the leg in the loading tower. This storage unit has room for 10,000 bus., but the Missouri-Illinois Grain Co. plans early construction of another 40,000 bus. of storage space to increase this to 50,000 bus.

THE CHANNEL in the Mississippi river runs close to the water's edge at the point where the Missouri-Illinois Grain Co.'s barge loading tower is located. Barges being loaded are held out from the water's edge by a dock barge anchored against the river bank in such manner that it may rise and fall with the water's level. The dock barge rides a 10 to 14 ft. depth of water in the channel and is spanned by the 12 inch barge loading spout which has telescoping sections to accommodate the rise and fall of the river, and a swinging feature that enables it to reach several barge holds without moving the barge. This minimizes the number of times it is necessary to shift a barge down stream in loading.

The Missouri-Illinois Grain Co.'s barge loading elevator has no direct rail connection. A hundred feet from the plant is a side track of the C. B. & Q. railroad on which cars may be loaded with scoop shovels should this become necessary. But rail shipping is a final resort when barges are unavailable.

THE ELEVATOR loaded 9 barges during the first 60 days of operation, with an average load of 35,000 bus. each of corn or soybeans. This is a light load for a 70,000 bu. barge, but low water in the channel, caused by a dry fall made it impossible to load barges heavier for fear the volume of water in the channel would not hold them off the bottom. Three barges were loaded full in 45 days following opening of navigation Mar. 15.

The Missouri-Illinois Grain Co.'s Quincy elevator draws grain by truck from elevators in a 40 mile radius around Quincy. A 3c differential is maintained in favor of elevators and nearly all the grain purchased is purchased from tributary elevators.

A toll bridge across the Mississippi river at Quincy is close to the elevator. Straight trucks are charged 50c per round trip, semi-trailer

trucks 90c, to bring grain from Missouri across the river.

Most of the barges loaded are supplied by the Federal Barge Lines. The Central Barge Line is the only private operator offering barges at Quincy.

The Missouri-Illinois Grain Co., Inc., is owned and operated by F. M. Sheppard, president; C. H. Stark, vice-president, and W. W. Sheppard, sec'y, all of Louisiana, Mo. F. M. Sheppard also owns and operates the Pike Grain Co., with grain and stock brokerage offices in Louisiana, and Sweet Springs, Mo., and an elevator at Pike's Station, across the Mississippi river from Louisiana. Lester Hoffman is in charge of the Quincy plant. W. W. Sheppard drives back and forth from the Louisiana office 60 miles away to help during the heavy buying seasons.

See illustration on outside front cover page.

With present prices below the loan values growers are showing no interest in offering new crop wheat. Unless this situation changes most of the crop will move to market for government storage.—Baldwin Elevator Co.

Grain Futures Trading 41% Above Previous Year

An increase of 41 percent in the volume of trade in grain futures on the Chicago Board of Trade during the fiscal year ended June 30 over that of the previous year has been announced by Dr. J. W. T. Duvel, Chief of the Commodity Exchange Administration. Approximately 85 percent of all trade in grain futures in the United States is conducted on the Chicago Board of Trade. Trading in four principal grains (wheat, corn, oats and rye) totaled 8,832,000,000 bus., an increase of 41 percent over the 6,253,000,000 total for 1938-39. The total, however, was only 71 percent of the 12,506,000,000 bus. average for the 10-year period 1930-39.

Wheat futures transactions increased 57 percent, from 4,372,000,000 bus. in 1938-39, to 6,850,000,000 bus. in 1939-40. Corn futures transactions (the only one to decline) declined 12 percent, from 1,494,000,000 bus. in 1938-39 to 1,312,000,000 bus. in 1940. Oats futures transactions increased from 271,000,000 bus. in 1938-39 to 359,000,000 bus. in 1939-40, an increase of 32 percent. Rye transactions increased from 117,000,000 bus. in 1938-39 to 311,000,000 bus. in 1939-40, or 166 percent.

Open Interest in Future Deliveries

As reported by the C.E.A. for wheat, corn, oats and rye, and by the Board of Trade Clearing House for soybeans the open interest in all futures on the Chicago Board of Trade recently has been as follows, in 1,000 bus.:

Daily Closing Prices													
The daily closing prices for wheat, corn, oats, rye, barley and soybeans for December delivery at the following markets for the past two weeks in cents per bushel have been as follows:													
	Option		Wheat		June	June	June	July	July	July	July	July	July
	High	Low	26	27									
Chicago	110½	75	79½	78¾	77½	75½	76½	76¾	79½	78½	77½	76½	76½
Winnipeg	79¾	74½	74½	74½	74½	74½	74½	74½	74½	74½	74½	74½	74½
Minneapolis	84½	73½	77½	76½	75½	73¾	75	75½	79½	79¾	78½	77	75¾
Kansas City	80¾	69¾	74	73½	71¾	69¾	70¾	70¾	74½	72¾	72	71¾	71
Duluth, durum	74	64½	67¾	67¾	66½	65½	66	66	72½	73¾	73	71¾	71
Milwaukee	85¾	75½	79½	78½	77½	75½	76¾	76¾	79¾	78½	78	77½	....
			Corn		June	June	June	July	July	July	July	July	July
	High	Low	26	27									
Chicago	67¾	53¾	57½	57½	57¾	54¾	55¾	54¾	55¾	55¾	54¾	55½	55½
Kansas City, July	69	49¾	62¾	62¾	63	62	62½	61¾	62¾	62¾	62¾	62¾	63½
Milwaukee	60¾	53¾	57½	57½	57¾	54¾	55	54¾	55¾	55¾	54¾	55½	....
			Oats		June	June	June	July	July	July	July	July	July
	High	Low	26	27									
Chicago	34½	29½	29¾	29¾	29¾	29¾	29½	29¾	30½	30	29¾	29½	29¾
Winnipeg	29¾	26¾	26¾	26¾	26¾	26¾	26¾	26¾	27½	27½	27	27	26¾
Minneapolis	81	26¾	27¾	27¾	27¾	27	26¾	27½	26¾	27¾	27	27½	27½
Milwaukee	34¾	29½	29¾	29¾	29¾	29¾	29½	29¾	30½	30	29¾	29½	....
			Rye		June	June	June	July	July	July	July	July	July
	High	Low	26	27									
Chicago	50¾	42½	45	44½	43¾	42¾	44½	45	47	46½	46¾	46¾	46½
Minneapolis	46¾	39	41¾	41	40¾	39½	41½	47¾	43¾	43¾	43¾	44¾	44
Winnipeg	47¾	39¾	41¾	41	40¾	40¾	....	41	43¾	44¾	43¾	43¾	44
Duluth, July	46½	38½	40	39½	38½	37	39	39¾	42	40¾	40¾	41	41½
			Barley		June	June	June	July	July	July	July	July	July
	High	Low	26	27									
Minneapolis	....	....	....	36½	35¾	35¾	36½	36½	38½	38½	38½	38	37½
Winnipeg	38½	33¾	34¾	34½	34¾	34¾	....	34½	35¾	36½	36	....	....
			Soybeans		June	June	June	July	July	July	July	July	July
	High	Low	26	27									
Chicago	75¾	71¾	72¾	71¾	73	72	72¾	73	74½	73¾	73¾	73¾	73¾
Canada Exchange	....	....	81¾	85½	85½	83¾	83¾	83¾	84½	87¾	87¾	86½	85½

*High, 1940. †No trade.

Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. Dealers having anything to say of interest to members of the grain trade are urged to send it to the Journals for publication.]

Everyone Well Paid Except Grain Man

Grain & Feed Journals: Do not lose sight of the fact that the charge of $3\frac{1}{2}$ c for handling goes into the farmers loan value and he is reimbursed by the government. Should 4c be charged by the elevators, then the farmer is only out of his pocket a half cent for you serving him in shipping this grain to the market. It is not unreasonable and the farmer should not object to paying the same.

We are all the more justified in getting a half cent profit in these operations, when each

County AAA Com'te deducts for their services a half cent from the returns given to the farmer. The County Com'te by merely filling out a few blanks and notarizing some papers, and being relieved of the actual labor in handling the grain, also in preparing freight and assuming all other uncertain factors on the part of the grain men, stand easily to make more out of their services rendered than those who handle the grain.

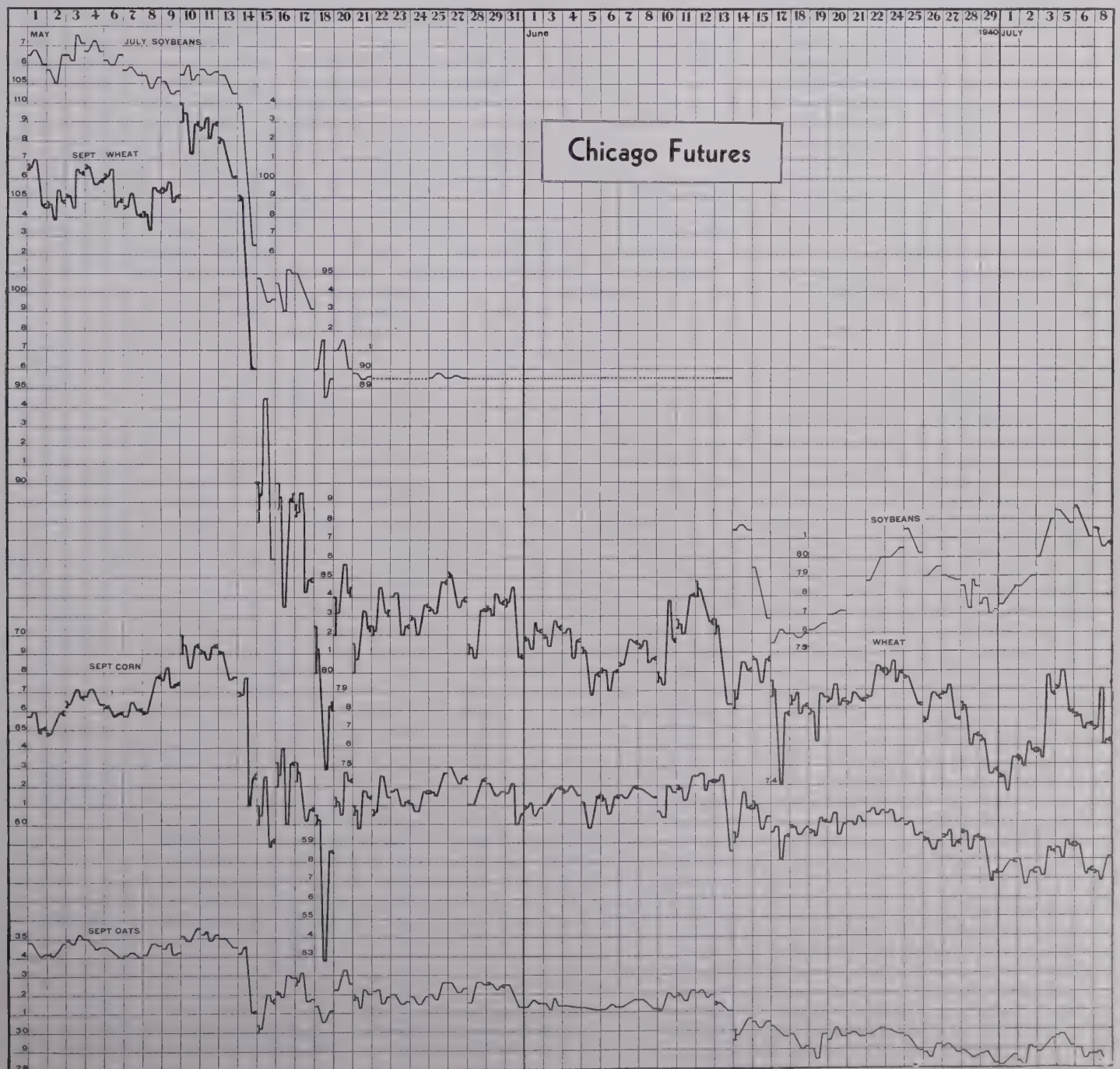
Should conditions result in giving some unpopular publicity to the grain dealers who may charge 4c per bushel, as has been indicated by some of the government officials of what may

happen, we in turn will give publicity to the fact that the local com'te is getting a very liberal allowance for their limited services.—Fred K. Sale, sec'y Indiana Grain Dealers Ass'n, Indianapolis, Ind.

Lost \$20,000 Revenue

Grain & Feed Journals: Mr. Hall, of the Pike Grain Co., Sweet Springs, Mo., has submitted to us figures on his corn shipments so far this crop. The trucks have hauled from his elevators 200,000 bus., the railroad 3,000 bus. About two-thirds of this corn was trucked to Oklahoma and the other one-third to southern Missouri and Arkansas. An analysis shows the railroad tried to get an average rate to destination of 26c per cwt., which is very unreasonable, while the trucks hauled it for an average of 18c per cwt., which is very reasonable for the distance.

The railroads got about \$300 revenue out of the 3,000 bus. and let slip \$20,000 revenue that they might have had, not by hauling this grain below cost but simply by hauling it at fair and reasonable rates.—S. C. Masters, Kansas City.



Crop Reports

Reports on the acreage, condition and yield of grain and field seeds are always welcome.

Boonville, Ind.—Wheat cutting in Warrick County is practically over. Many farmers used combines. The yield is reported better than last year.—W. B. C.

Corder, Mo., July 5.—Wheat acreage planted compared to last year, 100%, condition 85%; corn, 90%, condition, 95%; oats, 90%, condition, 90%. Practically none plowed up.—R. C. Frerking.

Petersburg, Ind.—Farmers of Pike County have cut their barley crop and the yield is heavy and the quality is good. Winter oats also have been cut and a good yield is reported.—W. B. C.

Calmar, Ia., July 5.—Acreage, oats, 100%; condition, 90%; acreage wheat, 90%, condition, 80%; rye, 90%, condition, 90%; corn, 90%, condition, 90%; soybeans, acreage, 110%, condition, 95%. Farmers have some corn on hand, sealed.—Meyer & Co.

Chicago, Ill., July 3.—Conditions of crops on July 1 promise the following yields, in bushels, (000,000 omitted): Winter wheat, 495; spring wheat, 230; oats, 1,060; corn, 2,415; spring wheat, Western Canada, 440.—H. C. Donovan, Statistician, Thomson & McKinnon.

Chicago, Ill., July 3.—The 1940 crop outlook with quantities reported in millions of bushels (000,000 omitted), are as follows: Winter wheat, 513; spring wheat, 230; all wheat, 743; corn, 2,432; oats, 1,079; rye, 37.5.—Nat C. Murray, Statistician, Jackson & Curtis.

Miami, Okla., July 5.—Wheat about 80% normal; oats, 15% above last year. Wheat will be sown here mostly this year. Farmers retain about 1/5 for seed and feed purposes. Wheat average about 21 bus. to acre here, good test and quality above last year.—Stauffer Grain Co., P. K. Stauffer.

Haskell, Tex., July 5.—About 3/4 wheat harvested, too much rain; average about 7 bus.; most oats and barley harvested; very poor crop, will not ship a car. Excessive rains have ruined all oats and barley that was made after drouth. No grain in farmers' hands; all selling or going in loan.—Haskell Elevator Co.

Minneapolis, Minn., July 6.—Experts are now predicting only four bushels per acre average for North Dakota, with five bushels on the average for South Dakota and ten to eleven for Minnesota. Precipitation and temperatures during the next two weeks will make or break the flax crop in the west.—Archer-Daniels-Midland Co.

Omaha, Neb., July 3.—Crop conditions are rather spotted in Nebraska and the central part is quite badly dried out altho there is a possibility that their corn may make a crop yet. Otherwise the state is fair to good and while we have a small wheat crop it is more on account of lack of acreage than anything else. Oats and barley are fair to good and in general corn is fully up to average.—Omaha Elevator Co., W. D. Hart.

Winnipeg, Man., July 4.—The week brought showers in Manitoba to help maintain a condition that is generally favorable. Serious deterioration is evident in some of the south-central and south-western areas of Saskatchewan, while considerable improvement is noted in conditions in the northern sections of the province. Rain is needed in southern Alberta, while moisture conditions in the northern districts are excellent.—McCabe Bros. Grain Co., Ltd.

Ames, Ia., July 8.—Early oats in most instances will probably be of good weight and quality, but yields will vary considerably. Some of them will be low because of bad weather early in the growing season, reports E. S. Dyas, extension agronomist at Iowa State College. Stands are thin because cool weather retarded stooling, and late freezes killed some of the oat plants. There is not much stem and crown rust this year, but smut is prevalent, and also halo-blight.

Coles, Ill., July 4.—Corn acreage 90% of 1939; wheat 95%; oats, 110%. All prospects for new crops splendid; grass crops splendid.—Ed Morris.

Alpha, Minn., July 3.—No wheat and no rye raised here; flax acreage increase over last year, 50% in very good condition, will average from 15 to 20 bus. per acre. Oats acreage increase 10%, in very good condition, and at present time looks as it will average from 45 to 55 bus. per acre. Barley acreage decrease 30%, condition fair will average from 25 to 35 bus. per acre. We have enough moisture to mature crops. Corn in good condition, acreage decreased 8%. Is making very good growth.—Alpha Grain Co., by Chas. Evers, owner.

Springfield, Ill., July 1.—Early threshing returns from southern Illinois or the soft wheat area vary widely and will average somewhat below the earlier favorable outlook, due to rust damage. Yields and quality have been especially disappointing in some of the heavier stands or in lodged grain or in later fields in the lower west central counties. The soybean prospect is up to average. Late planting is now completed and growth in most fields is now 2 to 8 inches high. The large acreage of row beans, which permits cultivation, is showing up better than drilled beans which are more weedy than usual.—A. J. Surratt, Sr., Agri. Statistician.

Winchester, Ind., July 6.—We hear all kinds of reports about Indiana having black rust, red rust, smut and one thing and another, but driving nearly 500 miles this last week I haven't seen any evidence of any kind of rust or smut either. One of our traveling men came in today with a number of small bundles of wheat he had taken from various fields in central Indiana, and I can't see anything but a good average crop. Good average crop in this part of Indiana means 25 to 35 bus. per acre. Cutting is under way and there is a lot of straw to cut taking a third more binder twine than it did last year. Larger fields will probably be cut by combine. Oats are looking fine. Corn is short, drove north to the Michigan line on Thursday, back the morning of the 5th and corn, while it is a good color and fair stand, is very uneven and about two weeks late. Talked to some farmers today who complained about needing rain, don't think they need it very badly.—Goodrich Bros. Co., P. E. Goodrich, Pres.

Topeka, Kan., June 29.—Pre-harvest wheat samples from Cowley, Chautauqua, Elk, Greenwood, Montgomery, Wilson, and Woodson Counties of Southeastern Kansas, show an average protein content of 11.8 per cent, with 67 per cent of the fields falling between 10.0 and 13.6 per cent protein. The test weight averaged 57.6 pounds per bushel, with 67 per cent of the fields falling between 54.2 and 61.0 pounds, as reported by the U.S.D.A. and Kansas State Board of Agriculture. In Southcentral Kansas, Barber, Harper, Sumner, Sedgwick, and Harvey Counties show an average protein content of 12.1 per cent with 67 per cent of the fields falling between 10.2 and 14.0 per cent protein. The test weight averaged 59.0 pounds per bushel with 67 per cent of the fields falling between 56.0 and 62.0 pounds. In 1939, these five counties showed an average protein content of 12.1 per cent with 67 per cent of the fields falling between 10.1 and 14.1 per cent protein.

Springfield, Ill., July 3.—In many places, particularly in the north, there are continued reports of subsoil dryness. Progress of corn was mostly fair to good in the south and good to excellent in the north, with condition in the north generally good and in the south fairly good to good. Considerable of the corn has been cultivated a fourth time or laidby. There is corn that is 4 feet high, but largely height ranges from 2 to 3 feet. Winter wheat is mostly fairly good to good; much has been cut with binder in the south and some has been combined, while harvest in the north-central is just beginning; some rust and lodging has affected returns. Oats are mostly good; some has been harvested in the south and in the north the earlier is ripening. Altho in places not all the soybeans are up, a little is still not planted, and there is some weediness, in general the crop is mostly good. The second growth of alfalfa is doing well. Clover continues mostly good and there has been much cutting for hay. Cotton in the Cairo area is looking fine.—E. W. Holcomb, U. S. Dept. of Agri. Statistician.

Chicago, Ill., July 3.—Corn production is estimated at 2,419,776,000 bus. Corn acreage is estimated at 88,318,000 and acreage yield per acre 27.4 bus. The winter wheat crop is estimated at 506,739,000 bus. The coolness of the season was sufficiently favorable to offset the effects of too much moisture during the filling period in some areas and a deficiency at that period in others. Winter wheat acreage yield per acre is estimated at 14.9 compared with 14.9 bushels last year and the 1929-38 average of 14.3. Spring wheat production is estimated at 218,907,000 bushels compared with our 229,480,000 last month and 191,540,000 last year. Rye production is estimated at 37,282,000 bus. compared with 37,925,000 bus. last month. The yield per acre is 11.6 bus. Oats yield per acre is estimated at 29.3 bus, compared with 28.3 final yield in 1939. Production on 35,548,000 acres is estimated at 1,041,000,000 bus. compared with 937,215,000, the 1939 final and 1,024,852,000, the 1929-38 average. Soybean acreage alone for all purposes is estimated at 10,721,000 compared with 9,170,000, our estimate for last year, (9,023,000 official 1939).—R. O. Cromwell, Statistician, Lamson Bros. & Co.

Minneapolis, Minn., June 28.—The spring wheat area in the Northwest is still showing steady improvement. A few spots lacking in moisture have deteriorated slightly, but timely rains may revive them. A few fields have been damaged too much by the drouth to be benefited much by rains. Although the crop as a whole is later than usual, the splendid weather conditions are bringing it along rapidly. The Pacific Northwest spring wheat is maturing but needs more rain. The Montana crop is in excellent condition with sufficient moisture at the present time to carry it along. Most of North Dakota is well supplied with moisture, although the subsoil condition is rather dry and a few days of hot weather may cause considerable damage to the crop. Some sections bordering the Red River Valley are in need of rain; but the crop as a whole is very promising. Minnesota is in fine condition, although the northern end of the Valley needs more moisture. South Dakota improved from the recent rains. The June estimate indicated a crop of 239 million bushels; losses from drouth, rust and insects may lower this figure. The Canadian Provinces have received fair to good rains the last week or two and the crop is making satisfactory progress.—Cargill Crop Bulletin.

Decatur, Ill., July 6.—Weather has been ideal for ripening of winter wheat. However, the Illinois crop is going to be spotted. There is going to be considerable variation in wheat yields and quality. Early threshing returns from southern Illinois vary widely and will average somewhat below the earlier favorable outlook due to rust damage. In some localities through this central area considerable wheat is being cut with binders. A little wheat was combined in this section this week, although harvesting will not get under way generally until next week. Yields and quality are going to be especially disappointing in some of the heavier stands that show considerable rust infestation and are badly lodged. Our nights continue cool, however one cannot help but marvel at the progress that is being made by the growing crop of corn. It has a wonderful color, and the favorable weather has enabled farmers to catch up with cultivation so that weedy fields have now been cleaned up. Considerable of the corn acreage has been laid-by. The oats crop has also benefited by the cool weather and it looks like the heaviest yields in years. The earlier fields are beginning to turn rapidly in this central area. This week still found some fields that were being clipped, part of which was baled up for hay. Some of the acreage is also being pastured. We hope more oats will be cut with binders this year, as past experience has proven that oats cannot be combined successfully.—Baldwin Elevator Co.

Minneapolis, Minn., July 5.—Northwest crop prospects have suffered a severe setback during the past two weeks as the result of inadequate moisture supplies over the greater part of the territory. However, some favored districts have received sufficient precipitation, or had reserves of subsoil moisture which have enabled crops to maintain their satisfactory condition. Southern Minnesota is the outstanding bright spot in the Northwest. All small grains are generally headed out, and are filling properly in the districts where moisture supplies are satisfactory. However, in the large and important

wheat producing areas of the Dakotas where drouth conditions prevail, the heads are short and filling has been retarded. Rye is maturing rapidly, and harvest of this spotted crop will start in the south about July 10th to 15th. The prospect for the oats and barley crops is somewhat better than for wheat as the important acreage of these grains is confined to areas where moisture supplies have been more satisfactory. Flax is generally in bloom, and its condition is relatively better than that of small grains. Corn is somewhat backward due to the cool weather but is making satisfactory, if somewhat slow, progress.—Van Dusen Harrington Co., by Jaul C. Rutherford.

Carrothers, O., July 8.—Wheat acreage about the same as last year; condition good; corn acreage larger than last year; condition not so good, very wet June; oats, acreage less than last year, condition good; soybean acreage the same, condition not so good. No crops plowed up. About two weeks late because of wet June; will cut wheat last of this week. Some oats turning; corn grassy, needs plowing.—Adrian McDougal.

Kentucky's eminence as a horse breeding state will find expression Oct. 14 in a horse show at the Rock Creek Riding Club staged for the entertainment of visitors to the annual convention of the Grain and Feed Dealers National Ass'n at Louisville.

In Canada the three methods of marketing open to the farmer at present are as follows: (1) selling thru the open market at minimum prices if and when buyers can be found at these prices; (2) delivering up to 5,000 bushels to the Wheat Board on the basis of an initial payment of 70 cents for No. 1 northern at Fort William or Vancouver; (3) delivering to sales agencies under the Wheat Co-operative Marketing Act on the basis of an initial payment of 56 cents per bushel for No. 1 northern at Fort William or Vancouver. Should prices rise above the peg the restrictions on sales thru the open market will automatically disappear.—Jas. Richardson & Sons.

Oats Movement in June

Receipts and shipments of oats at the various markets during June, compared with June, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	56,999	79,672	.....	.....
Boston	12,000	9,100	.....	.....
Chicago	606,000	1,778,000	1,059,000	1,652,000
Duluth	123,608	465,679	229,850	2,126,777
Ft. William	949,317	2,332,855	1,499,408	2,044,837
Ft. Worth	142,000	374,000	56,000	52,000
Indianapolis	200,000	310,000	226,000	350,000
Kansas City	44,000	66,000	20,000	58,000
Milwaukee	6,780	22,600	22,800	62,700
Minneapolis	459,000	1,320,750	675,000	598,000
New Orleans	.....	2,000	32,000	5,372
New York	142,250	297,787	.....	.....
Omaha	14,000	154,000	127,352	176,315
Peoria	134,000	136,000	126,000	431,500
Philadelphia	11,974	14,355	15,886	12,253
St. Joseph	94,000	154,000	2,000	38,000
St. Louis	158,000	101,500	162,000	116,000
Superior	115,694	319,607	144,897	1,013,500
Toledo	81,900	1,308,310	78,810	1,280,350

Corn Movement in June

Receipts and shipments of corn at the various markets during June, compared with June, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	197,506	203,539	.....	.....
Boston	.....	1,400	.....	.....
Chicago	11,074,000	7,896,000	6,329,000	6,950,000
Duluth	2,822,195	2,046,208	2,292,262	3,128,367
Ft. William	.....	18,219	1,072	.....
Ft. Worth	72,000	93,000	15,000	9,000
Indianapolis	1,045,000	1,212,000	697,000	1,276,000
Kansas City	726,000	705,000	517,500	714,000
Milwaukee	1,746,850	714,550	24,700	320,500
Minneapolis	1,444,500	1,225,500	1,702,500	2,172,000
New Orleans	49,117	378,341	223,500	189,400
New York	339,098	740,735	.....	8,000
Omaha	1,292,113	862,400	836,093	1,307,590
Peoria	1,860,428	1,399,085	752,100	619,985
Philadelphia	22,860	3,642	76,619	5,713
St. Joseph	439,500	136,500	136,500	331,500
St. Louis	811,500	664,000	559,500	450,000
Superior	2,129,235	1,713,827	1,481,689	2,460,542
Toledo	246,400	315,000	51,295	278,975
Wichita	1,300	1,300	.....	.....

Government Crop Report

Washington, July 10.—The crop reporting board of the U. S. Dept. of Agriculture makes the following report:

Crop	Acreage (in thousands) Har-vested For		Total production (in thou- sand bus.) Indicated July 1,	
	1939	1940	1939	1940
Corn, all	88,803	86,306	2,619,137	2,415,998
Wheat, all	53,696	52,680	754,971	728,644
Winter	37,802	34,922	563,341	523,990
All spring	15,894	17,758	191,540	204,654
Durum	3,066	3,330	34,360	34,954
Other spring	12,828	14,428	157,180	169,700
Oats	33,070	34,585	937,215	1,031,622
Barley	12,600	13,290	276,298	287,377
Rye	3,811	3,086	39,249	36,848
Flaxseed	2,284	3,168	20,330	28,801
Hay, all tame	58,347	60,573	.....	.....

A rubber stamp made from clean, clear cut gothic type with full mail address spelled out will relieve puzzled recipients of rapidly inscribed hieroglyphics from sending letters to wrong address. Printed stationery is much better, as it gives business firms an appearance of stability.

Barley Movement in June

Receipts and shipments of barley at the various markets during June, compared with June, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	2,667	3,826	.....	.....
Chicago	647,000	489,000	211,000	184,000
Duluth	234,345	536,799	562,379	535,710
Ft. Worth	4,800	1,600	19,200	3,200
Indianapolis	12,000	21,000	12,000	None
Kansas City	17,600	14,400	1,600	20,800
Milwaukee	1,262,020	834,000	442,200	357,450
Minneapolis	1,798,600	2,546,600	1,961,000	2,045,100
New York	1,700	30,949	.....	.....
Omaha	6,400	24,129	1,600	43,200
Peoria	295,200	200,520	174,000	135,900
Philadelphia	4,154	1,609	7,580	3,031
St. Joseph	3,500	None	1,750	None
Superior	140,698	240,023	188,814	251,892
Toledo	4,200	1,400	1,570	1,345
Wichita	.....	1,300	.....	.....

Rye Movement in June

Receipts and shipments of rye at the various markets during June, compared with June, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	34,918	41,421	.....	.....
Boston	1,100	.....	.....	.....
Chicago	363,000	68,000	138,000	97,000
Duluth	32,713	581,881	599,599	56,176
Ft. Worth	.....	1,500	1,500	.....
Indianapolis	1,500	3,000	40,500	6,000
Kansas City	1,500	13,500	.....	15,000
Milwaukee	.....	32,545	57,730	21,335
Minneapolis	313,500	1,255,500	285,000	285,000
New York	1,700	.....	4,000	.....
Omaha	791	63,726	21,000	11,200
Peoria	58,800	85,800	.....	13,800
Philadelphia	35,268	.....	22,100	.....
St. Joseph	.....	.....	.....	.....
Superior	27,693	379,367	610,721	56,000
Toledo	1,400	26,600	16,730	10,595

Wheat Movement in June

Receipts and shipments of wheat at the various markets during June, compared with June, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	407,167	42,370	40,000	.....
Boston	447,267	.....	156,844	.....
Chicago	1,033,000	989,000	1,448,000	1,228,000
Duluth	2,033,670	5,650,341	5,307,430	4,013,218
Ft. Wm.	27,565,843	6,818,806	18,489,075	22,799,785
Ft. Worth	3,720,000	6,686,400	508,800	1,089,600
Houston	.....	.....	.....	1,223,000
Hutch's'n	1,683,450	5,925,150	.....	.....
Ind'polis	272,000	129,000	102,000	46,000
Kan. City	3,515,200	15,252,800	1,463,275	2,241,080
Milwaukee	246,995	3,080	239,400	5,600
Minn'polis	3,618,000	9,547,500	1,707,000	2,070,000
New Orleans	.....	2,800	46,412	65,802
New York	1,230,536	201,899	651,000	110,000
Omaha	257,143	1,847,361	324,511	525,000
Peoria	70,500	140,900	47,550	136,900
Philad'phia	319,905	34,350	55,284	89,191
St. Joseph	128,000	1,707,200	281,600	276,800
St. Louis	413,000	1,107,000	823,500	729,500
Superior	1,116,834	2,922,504	1,823,532	1,211,552
Toledo	256,905	692,000	535,805	275,715
Wichita	3,379,500	9,850,500	1,257,000	4,296,000

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Coles, July 4.—Fifty per cent of corn, no oats or wheat to speak of, in farmers' hands, and same true of soy beans.—Ed Morris.

Alpha, Minn., July 3.—Very little grain in farmers' hands with the exception of sealed corn.—Alpha Grain Co., Chas. Evers, owner.

Corder, Mo., July 5.—All wheat in farmers' hands; 30% corn in farmers' hands (1939 crop); all the oats in farmers' hands.—R. C. Frerking.

Des Moines, Ia.—Shipments of corn by barges from southern Iowa and Illinois ports on the Mississippi River to Memphis, Vicksburg, Greenville, Baton Rouge, New Orleans and Miami are averaging about 2,000,000 bus. monthly.

Chicago, Ill., July 3.—The July 1, 1940 surplus of old wheat is estimated at slightly over 1,400 million bushels, whereas 700 million bushels would be a normal surplus carry-over from one season to another.—Nat C. Murray, Statistician, Jackson & Curtis.

Buffalo, N. Y.—About 3,500 bus. of wheat removed from the salvaged barge Buster has been returned to Buffalo for drying. The wheat-laden vessel sank in the Barge Canal about 20 miles west of Hulberton, N. Y., and blocked traffic for more than 48 hours.—G.E.T.

Kansas City, Mo.—The first car of 1940 barley to reach Kansas City this season arrived today, coming from Rich Hill, Mo. It was No. 1, 47½ lbs., 13.8% moisture and 97% sound, slightly weather stained. Last year the first barley arrived here June 22 from southwestern Kansas.

Kansas City, Mo.—Receipts for the 1939-'40 crop year ended June 30, as compared with 1938-'39 (shown in parentheses) expressed in bushels with 000's omitted, are here shown: Wheat, 65,542 (110,613); corn, 11,419 (10,955); oats, 1,446 (3,350); kafir, 625 (918); rye, 297 (530); barley, 389 (402); cane, 34 (38); total, 79,752 (126,806).

St. Louis, Mo., July 4.—Most of the wheat between Kansas City and St. Louis has been bound or combined, a good share of it being round, particularly in the late varieties where rust was proving a hazard. The run at Missouri elevators is not excessively heavy, but it never is and this year is about normal. Most of the wheat is going under government loans.—E.W.M.

Ottawa, Ont., July 5.—Canadian wheat in store for the week ending June 28, increased 1,148,624 bus. as compared with the previous week and increased 177,252,519 bus. when compared with the corresponding week in 1939. The amount in store was reported as 281,046,123 bus. compared with 279,897,499 bus. for the previous week and 103,793,604 bus. for the week of June 30, 1939. Wheat receipts in the Prairie Provinces for the week ending June 28, amounted to 3,948,638 bus., an increase of 463,328 bus. over the previous week when 3,485,310 bus. were marketed. During the corresponding week a year ago the receipts were 1,137,447 bus. Marketings in the three Prairie Provinces for the 48 weeks from Aug. 1, 1939 to June 28, 1940 as compared with the same period in 1939 were as follows, figures within brackets being those for 1939: Manitoba 52,340,635 (43,598,402); Saskatchewan 226,724,041 (113,620,941); Alberta 126,763,939 (125,404,612) bus. For the 48 weeks ending June 28, 1940 and the same period in 1939, 405,828,615 and 282,623,955 bus. were received from the farms.—R. H. Coats, Dominion Statistician.

Soybean Movement in June

Receipts and shipments of soybeans at the various markets during June, compared with June, 1939, in bushels, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Chicago	447,000	890,000	332,000	403,000
Indianapolis	24,000	16,800	None	9,800
Peoria	13,500	7,500	33,500	.....
St. Joseph	12,000	1,500	None	None
Toledo	16,500	106,500	.....	354,315

Imports Into Lands Closed by War

During the crop year ending June 30, 1936 imports were: Germany, 3,695,000 bus.; Belgium, 40,726,000 bus.; the Netherlands, 21,394,000 bus.; Denmark, 9,077,000 bus.; Norway, 7,999,000 bus., and Poland, 1,000 bus. of wheat.

During the five crop years ending June 30, 1930, imports were, on the average annually: Germany, 85,668,000 bus.; Belgium, 43,482,000 bus.; the Netherlands, 30,050,000 bus.; Denmark, 10,102,000 bus.; Norway, 6,964,000 bus., and Poland, 4,820,000 bus. of wheat.

Corn imports during the crop year ending June 30, 1936, were: the Netherlands, 35,511,000; Germany, 8,119,000; Belgium, 35,117,000; Denmark, 8,864,000; Norway, 5,360,000 bus. Average imports of corn during the 5 crop years ending June 30, 1930, were, the Netherlands, 44,523,000; Germany, 42,826,000; Belgium, 24,268,000; Denmark, 18,676,000; Norway, 4,588,000, and Poland, 2,008,000 bus.

Oats imports during the crop year ending June 30, 1936, were Belgium, 3,209,000; the Netherlands, 1,660,000; Denmark, 598,000, and Norway, 156,000 bus. For the five years 1925-1930 the annual average was: Belgium, 8,210,000; the Netherlands, 7,851,000; Denmark, 3,255,000, and Norway, 714,000 bus. Altho Germany imported 15,581,000 bus. oats during the 5-year period its exports were 20,070,000 bus. during the same time, as reported by the U. S. Dept. of Agriculture.

Barley imports into Germany for the crop year ending June 30, 1936, were 3,280,000 bus., while for the 5-year period, 1925-1930 they averaged 83,542,000 bus. annually. In recent years the imports were small, on account of inability to pay. If Germany wins the present war and collects heavy indemnities imports of barley may be expected to break all records. The Netherlands imported 13,462,000 bus. during the crop year ended June 30, 1936; Belgium, 18,970,000; Denmark, 450,000, and Norway, 690,000. For the 5-year period 1925-1930 the Netherlands imported 14,460,000 bus. annually on an average, Belgium, 13,586,000; and Denmark, 3,494,000 bus.

Soybean imports during the five calendar years 1925-29 averaged 394,965,000 pounds into Denmark, 58,510,000 pounds into the Netherlands, and 1,390,622,000 pounds into Germany.

During the crop year ended July 31, 1939, according to Broomhall, Denmark, Norway, Holland and Belgium together imported about 88,000,000 bus. wheat and flour.

In France the prospect for this season's crop is very unfavorable following the hardest winter in years, severe spring floods and lack of manpower to look after the crops, so that France will be in need of heavy supplies this winter.

Rice Growers of Arkansas

A favorable outlook for rice was noted at the annual meeting of the stockholders of the Arkansas Rice Growers Co-operative Ass'n at Stuttgart, Ark., June 24.

"All rice from the 1939 crop will be sold, shipped and delivered before the new crop comes in," said Sec'y A. F. Knoll.

"In addition to the rice sold through regular channels, we have sold considerable rice to the Federal Surplus Commodities Corporation." The movement has strengthened the rough rice market to a great extent, yet there is not much rice left in farmers' hands.

The association operates mills at Stuttgart, DeWitt and Jonesboro. Officers re-elected were H. K. Smith, Brinkley, pres.; R. E. Short, Wheatley, vice pres.; A. F. Knoll, Stuttgart, sec'y.—J. H. G.

Margin requirements have been increased by the Chicago Board of Trade on net long positions on oats from 2c to 4c per bu. and on rye and soybeans from 5c to 10c. The requirements remain unchanged on net short positions.

Broader Seasonal Regulation

The Wage and Hour Administration has announced that the "seasonal" exemption may be made applicable in the packing or storing of agricultural commodities in their raw and natural state, where the industry receives for packing or storing 50 per cent or more of its annual volume in 14 workweeks.

Under section 7(b)(3) of the Fair Labor Standards Act, payment of overtime need not begin until after 12 hours in any workday and after 56 hours in any workweek for a period, or periods, of not more than 14 workweeks in the aggregate in any calendar year "in an industry found by the Administrator to be of a seasonal nature."

Section 526.3 of these regulations states: "The exemption for an industry of a seasonal nature is applicable to an industry (a) which both

"(1) engages in the handling, extracting, or processing of materials during a season or seasons occurring in a regularly, annually recurring part or parts of the year; and

"(2) ceases production apart from work such as maintenance, repair, clerical, and sales work, in the remainder of the year because of the fact that, owing to climate or other natural conditions, the materials handled, extracted, or processed, in the form in which such materials are handled, extracted, or processed, are not available in the remainder of the year."

The amendment announced June 25 made immediately effective adds to this section: "or (b) which both

"(1) engages in the packing or storing of agricultural commodities in their raw and natural state, and

"(2) receives for packing or storing 50 per cent or more of the annual volume in a period or periods amounting in the aggregate to not more than 14 workweeks."

Death of Henry R. Wilber

After having been in a hospital for nearly two years and after having undergone several major operations Henry R. Wilber passed away at Lakewood, N. Y., June 26, aged 66 years.

He originated the old New York Retail Feed Dealers Ass'n, since succeeded by the Tri-State Retail Feed Dealers Ass'n, and the present Eastern Federation of Feed Merchants.

He had been a director of the Grain and Feed Dealers National Ass'n, was president of the National Feed Distributors Ass'n in 1924-25 and was active in entertaining the Mutual Millers & Feed Dealers Ass'n when holding its summer meetings at Jamestown. For 7 years he was mayor of Lakewood.



H. R. Wilber, Jamestown, N. Y., Deceased

His business was conducted as the Wilber Feed Co. at Jamestown, N. Y.

Driveway Observations

By TRAVELER

UP-TO-THE-MINUTE grain dealers claim the government crop insurance program, as applied to wheat, has worked with the customary results of government projects and is leading to another tremendous loss to be shouldered by the taxpayers.

"It should be noted," they point out, "that virtually all of the wheat crop insurance taken out, has been taken out west of the Hundredth Meridian, a north and south line passing thru the approximate middle of Kansas. West of this line farmers normally expect two and three wheat failures every five years. Crop insurance is a good bet for a further subsidy. East of this line, where crop failures are seldom known, few farmers are willing to pay the wheat crop insurance premiums. They can better afford to carry the risk themselves."

President Roosevelt is reported to have taken cognizance of this situation, which must inevitably lead to heavy losses to the government in effecting the wheat crop insurance program, by vetoing a proposal passed by Congress to extend crop insurance to cotton.

* * *

SOUTHWESTERN elevator operators in the hard winter wheat belt are reported to be setting up firm resistance to efforts of A. A. A. officials to force upon them a government wheat storage contract allowing 1/30th cent per bu. storage for six months from date of warehouse receipt, remainder of 12 months to "be free." With no certainty of disposal of stored grain until after a new crop comes on the market, as suggested by such storage contract, grain elevators cannot gauge their operations on a new crop, for fear of having no room.

* * *

FROM TIME to time we have been hearing impressive tales about tall wheat in the Southwest. A field on low lands at McPherson, Kan., is reported to have wheat 6 ft. 2 inches high. C. D. Jennings, at Hutchinson, Kan., showed us a field with wheat 60 inches high only a mile and a half from the city. The latter was Chiefkan wheat. Unfortunately height has little to do with quality. Chiefkan wheat is not liked by millers because it makes a poor quality of flour.

* * *

MORE FARMERS than usual are turning back to the use of the binder in harvesting wheat, report elevator operators in southeastern Kansas. The reason, they say, is last winter's cold weather. Most of these farmers raise cattle. Last winter they wished they had saved more straw for bedding and for shelter. A cavern in a straw pile makes good shelter and straw left on fields cannot be used for protecting cattle.

* * *

CHARLES W. ENGLISH, grain buyer at Mulvane, Kan., exhibits a letter from a farmer near Tribune, Kan., who mentioned having 400 acres of spring wheat. Farmer G. W. Shell, for whom Mr. English has done some combining, wrote, "It is spring wheat, and it looks nice."

From Abroad

Since the war in France ended cable service has been available to areas not occupied by German forces.

A uniform selling price of \$1.13 per bushel for imported wheat has been announced by the cereals control board of the United Kingdom.

In Denmark since the German invasion it is reported that 12,000 cattle have been slaughtered, about one-half for lack of feed. About 3,000,000 hogs have been slaughtered for the same reason.

Michigan Elevator Has Double Driveway

Partners in erection and operation of the 20,000 bu. Richville Elevator, at Richville, Mich., are Richard Hoerlein, who has operated an elevator at that point for many years, and his son, Carl.

In planning and investing in the new elevator they planned for the future as well as for the present. All elevating and conveying machinery was fitted with anti-friction bearings, and dustproof, inclosed motors to reduce fire hazards and minimize power expense. Machinery was arranged for continuous separate operation on grain, beans and feed grinding.

CUSTOMERS can be served no faster than they can crowd up to the receiving and handling facilities of an elevator. For this reason the elevator has a double driveway. On one side is the grain receiving facilities, on the other side is the feed mill. Feed grinding customers do not crowd the driveway to hold up customers anxious to deliver grain or beans, nor do deliveries interfere with feed mill patrons.

Grain handling facilities are also separate from the bean department to prevent interference between these two activities, as would occur if the same facilities were used for handling each commodity. One end of the elevator is used for handling grain, the other end for

handling beans, each department having separate legs, cleaners, scales and spouting.

THE NEW RICHVILLE ELEVATOR is of frame construction, covered with corrugated sheet steel, with roofs and sides bonded thru "bird-proof" eaves, and the sheet steel grounded to protect the plant from lightning.

The elevator rests on the reinforced concrete walls and pillars of a 30x40 ft. full basement, and rises 44 ft. above the ground floor. The cupola is 16 ft. higher to make room for the heads of the main elevator legs. The basement is 8 ft. deep, with the leg boots resting on its concrete slab floor. Quick passage from floor to floor is provided by a Western manlift.

The grain division of the elevator has 9 small, deep, cribbed bins, with total capacity for 10,000 bus. The bean division has 8 similar bins, also with total capacity for 10,000 bus.

MACHINERY is assembled on the workfloor. The hoppers bottoms of all bins end above the workfloor, and have spouts and cut-off valves to drain contents into legs or machines. Machinery in the grain end of the structure includes a 450 bu. per hour grain cleaner and a 60 bu. Fairbanks hopper scale, in addition to elevating legs. Machinery in the bean end duplicates the machinery in the grain end, except that a Crippen cleaner is used, and a Fairbanks sacking scale is provided in addition to a Fairbanks hopper scale.

A McMillin traveling truck hoist in the driveway serves both the grain and the bean receiving pits, traveling on long, overhead tracks to

reach each. Each pit drains into its own receiving leg, which elevates the commodity received into a garner bin over its cleaner. Another short leg follows each cleaner to elevate into separate 60 bu. hopper scales. These scales in turn empty into boots of separate legs, each of which has its own distributor.

Dust laden air from each cleaner is blown to a separate dust bin outside the elevator. These dust bins are built like cyclone dust collectors, with large air-escape vents, and clean-out doors at their bottoms.

THE GRAIN HANDLING legs at one end of the house duplicate the bean handling legs at the other end. The receiving legs and the main legs have 4x7 inch Calumet cups, the scale legs have 4x5 inch Calumet cups. The legs are run by V belts from the cleaner motors, a 10 h.p. motor operating the grain cleaner and two legs, a 15 h.p. motor running the bean cleaner and its two legs. A single 5 h.p. motor in the cupola runs both main legs thru V belt, jack shaft and roller chain. Both main legs are carried on a single head shaft.

Altho the legs have capacity for handling 1,000 bus. per hour or more, they require little power. All head and boot shafts turn on SKF ball bearings to reduce friction to a minimum.

The main grain leg distributes into a car loading spout which reaches a side track of the Michigan Central Railroad, a truck loading spout leading to the elevator driveway, and a feed mill spout which empties into a garner bin in the feed plant, as well as the 9 grain bins of the elevator.

The main bean leg empties into a sacking spout, and into a garner bin that serves the 20x20 ft. two story bean picking unit adjoining the bean end of the elevator, where two mechanical bean pickers will be installed, to be followed by the sacking scale and a sewing machine for closing sacks.

THE FEED MILL is a 50x25 ft., one-story and basement, frame, sheet steel clad structure separated from the elevator by the 30 ft. wide, 60 ft. long, driveway. A narrow loading dock follows its driveway wall at truck bed height. Heavy machinery in the feed mill rests on supports from the concrete floor of the basement. This machinery includes a corn sheller, a corn cracker, and a Blue Streak hammer mill which is preceded by a Nickle crusher feeder. The hammer mill is run by a direct-connected 40 h.p. motor. Three legs serve these machines. The cob leg has 9x5 inch Calumet buckets, the shelled corn leg has 4x5 buckets of the same make, and each leg is driven by a 2 h.p. enclosed motor. The cracker leg has 4x5 inch buckets, and is driven by a 1½ h.p. motor. The three legs are equipped with SKF ball bearings.

On the workfloor of the feed mill is a 1½ ton vertical feed mixer. Next to the feed mixer is a 30 bu. steel garner bin to hold feed ready for the mixer.

ONE CORNER of the workfloor is partitioned off and inclosed to serve as a customers' room, in which customers may keep warm while they wait for their grist and where the smoking of pipes will not constitute a fire hazard. Extra fire precautions are taken thruout the plant in the location of bright red fire barrels full of calcium chloride solution at convenient points on every floor.

WHEN the new elevator was built Richard and Carl Hoerlein went a step farther by having the contractor build an 80x44 ft., one-story, frame, sheet steel clad warehouse, with concrete floor. In this building is kept the retail stocks of flour, feeds, building materials, hardware, cement and fencing. At the same time a 15x30 ft. garage was added to the back end of the office for the 1½ ton Chevrolet truck used for making deliveries, and the office was refinished inside with mahogany veneer walls and celotex ceiling.

FINISHING touch on the elevator is the flagstaff that rises from the ridge of the cupola



Above, left: Richard Hoerlein, proprietor of the Richville Elevator, Richville, Mich. Carl Hoerlein (right) with hammer mill screen rack in basement of feed mill unit. Below: The new feed grinding and elevator units.

and on the office is a set of dual horns that substitute for a noon whistle.

The elevator was designed and built by Burrell Engineering & Construction Co.

Noted Grain Elevator Engineer Dead

Robert P. Durham, president of the Macdonald Engineering Co., died July 7 in St. Luke's Hospital soon after a heart attack in his Chicago offices.

Born at Evanston, Ill., Sept. 27, 1879, he was educated at Lewis Institute of Technology, and in 1900 entered the employ of the Webster Mfg. Co., at Chicago, making elevating, conveying and power transmitting machinery.

His world-wide experience in grain elevator construction came with his connection with the John S. Metcalf Co., during the years 1901 to 1916, as engineer, having charge of work at Montreal, London and Melbourne, Australia, and investigation of grain handling facilities in Russia, Holland, Germany and France.

As vice president of the Macdonald Engineering Co. from 1916 to 1921, and president since, he engineered the construction of grain elevators, flour mills, cement plants, concrete ships, and did important construction work for the Russian government in 1929 and 1930.

The government of South Australia in 1915 and the government of Victoria in 1916 called on him for extensive reports on grain handling systems and bulk storage. His most recent work was on the 3,500,000-bu. grain storage plant of the Anderson Elevator Co., Maumee, O., and the 2,500,000-bu. soybean storage of The Glidden Co., at Chicago.

He was president of the Macdonald Engineering Co. of Canada, and of the Oakland Elevator & Mill Co., Oakland, Cal., a director of North American Elevators, Ltd., Montreal, of the Ontario Construction Co., St. Catharines, Ont. He was a member of the American Society of Civil Engineers, Western Society of Engineers, the Art Institute of Chicago, and the Union League Club.

He found recreation in gardening and foreign travel. He resided in Elmhurst, Ill., where he is survived by his widow, the former Alma E. Macdonald. Interment was in Memorial Park Cemetery.



Moffett Photo

R. P. Durham, Chicago, Ill., Deceased

Explosion Tests Developing Facts

By C. J. ALGER, President, Chicago Chapter, Society of Grain Elevator Superintendents

WHY are men killed in a dust explosion when they are not even in its path?

DO explosions have affinities?

WHAT causes their freakishness?

CAN you determine or alter their course?

JUST how forceful is their resistance to any man-made influence?

ARE the greatest pressures created accompanying with the most flame?

WHAT does a graph of an explosion phenomena look like?

HAVE we lulled ourselves into a false sense of security on our unknown static problem?

WHERE do we go from here in dust explosion prevention,—or at least its minimization?

\$5555 TO FIND OUT: The Corn Industries Research Foundation is spending \$5555 to try and determine the answers to these questions. Tests in two 30-foot 12-inch standard conveyors, joined by a 6-foot 30-degree angle conveyor-equipped choke-trap are really opening our eyes to a lot of new facts. We are utilizing an idle Corn Products Refining Company's building at Argo, Ill., for this work which is being carried on for us by the well-known Mr. A. H. Nucholls, veteran Chief Chemical Engineer of the Underwriters' Laboratories.

In reporting on this work before the monthly meeting of the Chicago Chapter of the Superintendents' Society, Mr. Nucholls reveals some very pertinent data worthy of further study and consideration by everyone associated with the grain handling and grain processing industry.

WHY MEN DIE? For years we have been puzzled by the deaths of men NOT in the direct path of dust explosions. With no signs of burned lungs, no outward indices of even scorching, we all have been stumped for the answer to the loss of lives of those adjacent to such blasts.

We think we have found the answer through analyzing the air following one of our tests. The fumes are most irritating so we determined to find out exactly what were the products of this combustion. All we had to know to answer the above question was that from two to three percent of carbon monoxide was present. One-tenth of one percent breathed for two minutes produces unconsciousness, one-half of one percent is fatal, two to three percent is instantly deadly.

Carbon monoxide prevents the red corpuscles of the blood from using the oxygen taken into the lungs. The only treatment for a man who has had a trace of it is inhalation of a mixture of 94% oxygen and 6% carbon dioxide.

AFFINITIES are a phase of explosion work upon which some further experimental work is doubtless necessary. In an explosion in the Dextrine Department at Argo starting in the driers and backing up through the cookers, the flame licked off a sample spread out on a nearby laboratory desk, singed off the dust on the outside of a sacked sample of Dextrine in a distant corner, and then shot skyward to "fry" a spot of paint on the ceiling.

We've all seen or heard about a lot of similar freakish propensities of explosions and their reoccurrence should lead us to some pretty definite conclusions after further study. We feel that more intense scrutiny of the behaviorism of such tendencies will ultimately point the way to currently hidden characteristic potentialities that in turn may unscramble the secret of propagation in the future. This problem does not seem too far akin from the phenomena of a soft ear of corn being driven through a hard telegraph pole during a tornado,

for surely some of the conditions surrounding both a tornado and a dust explosion are similar.

NO DETOURS HERE.—One straw in the wind on the matter of determining the course of a dust explosion seems to indicate that straight-line action is the rule. This is further borne out by reports of explosions throughout the continent within the last two decades wherein blasts have pushed out concrete walls rather than to vent themselves through adjoining openings.

We arrive at this conclusion through the pressure readings found on different positions on the far end of the first conveyor box in which the test explosions are ignited. The dust in the rotating conveyor is ignited with specially prepared "minus-squibb" caps at the hopper end and the blast build up force at the far end, rebounds in all allowable directions and finally bursts out at the weakest point. Our innumerable devices for recording every action do seem to lead us to believe that an explosion flashes in a single line, of least resistance at the beginning, and as the thunder-cloud streaks into an obstacle it crashes to break out in any and every weak spot anywhere.

The most recent trials show that pressures now are being built up so strong that their force is compressing the corn starch in the 100%-full choke-trap, muscling its way through the starch-choked conveyor, and diffusing itself in the adjoining conveyor. Reason for no fire being carried through the choke-trap, although there has been a little scorching, seems to be the lack of oxygen and the highly dusty atmosphere created when the explosion pressure forces itself through. Pressure readings, not too high, but high enough to be recordable, have burst through the choke-trap and become dissipated into the second conveyor.

NEW HIGH IN PRESSURES.—The conclusion seems sound, therefore, that any attempt to alter the course of an explosion must be founded on the knowledge that pressures of 17 pounds over normal per square inch, yes and probably even beyond that (because so far this is the peak within one 30-foot 12-inch conveyor) must be met. Whether or not one should multiply 17 pounds per square inch in a 30-foot conveyor by the dimensions of that part of the plant where an explosion might happen to determine the pressures that might be created is only partially problematical, for the more space then the more compression area that can be built up.

One thought seems evident: That is that an explosion would seem to need a wall venting area equal in dimensions to that of the cross-section in which it is confined up to Dr. D. J. Price's rule of one square foot of venting area for each confined 80-cubic feet of enclosed area.

One odd observation made was that the greatest pressures experienced were NOT accompanied by the largest volume of flame. Compared with some of the pressures one-third as great, the volume of accompanying flame and the amount of damage done to the iron-enforced conveyor box does not seem to work in any noticeable ratio. We progressively vary the amount of starch fed from the hopper into the conveyor, add compressed air in the feed hopper to be sure of a constant flow but to date have not discerned any fixed flame reaction.

GIVES WAY AT VARIOUS SPOTS.—We have arranged this equipment so that the blown-out conveyor lids may be quickly replaced so that as many tests can be run in a day as possible. It is interesting to note that the explosions, the pressures, the spots the explosions blow out and the volume of flame seem to have no established relationship. An

explosion of low pressure may blow out two places while one of higher recorded pressures may push up the iron-enforced lids in only one spot and then only a few inches. When we created the 17 pounds of pressure the reading at the hopper end was 13 pounds and the conveyor lids gave away in the approximate middle. Of course the difference in pressures was due to the effect of inertia.

GRAPH SHOWS VACUUM.—We are also recording the rate of rise of the pressures, too. As another point of interest, and we will publish them with our full report upon conclusion of our tests, is that the graph of each explosion has its own distinctive characteristics. Some are like mountain peaks, others like the swell of the seas, some almost have curlycue tops, others are painfully straight.

Some of the more interesting graphs of late have shown a very definite negative pressure which almost equals the positive pressure readings. Just the other day a six-pound per square inch explosion produced nearly as much negative (vacuum) reading.

Armed with this data, which we will carry to further conclusions, doubtlessly further explosion phenomena can eventually be explained and such riddles as the complete dissolution of an employee solved. Heretofore we have only theorized that the tremendous positive and negative pressures have wrought assunder even the slightest trace of a worker's ring which certainly would not be as perishable as his flesh.

BABES ON STATIC.—According to tests conducted at the Underwriters' Laboratories we are babes in arms, on this subject of static. Blowing dust through a tube has produced as high as 9,000 volts. It seems to make no difference what grain or grain product we used we could be sure of generating from 3,000 to 5,000 volts. Just the friction alone causes the static to be built up and that high a voltage is ample to ignite most anything flammable.

Not only did we record these voltages, but we found that even electrically bonded joints, with the ducts all properly grounded, permitted the generation of from 4,000 to 5,000 volts of static. Even the dust beyond the ducts held a substantial amount of charge, because dust, of course, is not a conductor. Perhaps painting ducts with rubber paint would solve this problem.

In an effort to ground static we even equip all our belts with a metal screen comb to take off the charge. This is in addition to grounding all moving equipment. We feel the industry is still in the dark on its static problem.

IMITATE ACTUAL CONDITIONS.—Someone is going to ask about the weather conditions and the relation of the intensity of the explosions thereto. Both our equipment and our tests have so far been run to imitate actual conditions and in our final report a full account of the weather will be taken. Damp days do effect our explosions, for we find we need more starch to produce the same results when the atmosphere is muggy. This may bring some new thoughts to light on the part of our readers, as there seems to be a pretty well fixed impression that the industry generally has most of its explosions on muggy days. Statistically this impression is incorrect.

For over ten years we have been using choke-traps similar to those being experimented with in several dangerous locations in our Argo plant. Millions of pounds of starch go over them every day, so far without any mishap.

CORN, FEED, DUSTS.—Upon the conclusions of this series of experiments, provided we have enough monies to carry on, we are going to continue the tests using corn, feed, dusts, etc. And if other agencies wish to carry on from where we leave off we will gladly co-operate with them. We know there is some difference between the explosive qualities of wheat and corn, for instance, and between corn and the products of corn, but not a great deal.

We are primarily interested in trying to confine any explosion we might have to one spot, without propagation. We invite all to come out to Argo during the two months of making tests that remain, not, necessarily, to see a seething 7-foot flash of flame, but for any further ideas we may jointly develop.

Gasoline Tank Used for Grain Storage

Gasoline dealers at Seward, Neb., were worried when they saw a reclaimed bulk gasoline storage tank being erected beside the 25,000 bu. cribbed elevator of Imig-Schneebeck Grain Co. For a moment it looked like Imig-Schneebeck Grain Co. was going into the wholesale gasoline

and oil business to augment its retail business in these products. But if such were the case they could not understand placing of the tank so close to the elevator.

Purpose of the tank is to serve as additional grain storage. It is 25 ft. in diameter and 30 ft. high, made of quarter inch steel plates, bolted together with a double row of bolts at all joints, and holds 14,000 bus., bringing the total storage capacity of the Imig-Schneebeck elevator to 39,000 bus.

The tank rests on seven 12 inch walls of concrete that extend 4½ ft. or more into the ground to mushroom against solid hard pan. Drafts of cooling air can pass between the walls under the steel bottom of the tank.

A few innovations have been added to the tank to make it suitable for grain storage. The roof is coned, and fitted with a ventilator at the top. Thru the ventilaor air escapes as grain is run into the tank thru a 6¼ inch spout from the elevator cupola.

The bottom of the tank is flat, but under it is a 9 inch screw conveyor to draw the grain back into the elevator receiving pit, from which it drains into the leg boot. A manhole near the bottom of the tank admits a man to enter and shovel the grain remaining on the flat bottom into the screw conveyor. A short spout opening in the side of the tank over the screw conveyor will drain a large share of the contents of the tank into the driveway receiving pit, without operation of the screw conveyor.

At 6 ft. intervals up one side of the tank on the outside capped pieces of 1 inch pipe project. Thru these pipes the elevator operators can thrust a brass inclosed thermometer attached to the end of a rod and determine the temperature of the grain in the tank. The metal caps that screw over these pipe openings prevent admission of rain or moisture.

The tank was purchased from Economy Welding Co. on a contract which included erection on a foundation prepared by Imig-Schneebeck Grain Co. Six men erected the tank in nine days, and applied a waterproofing compound on the joints and around the bolts.

Aerating Unit Cools Country Elevator Office

BY TRAVELER

More and more cooling systems are being found in offices of country elevators as well as in offices of grain dealers in primary and terminal markets.

The Emma Co-operative Elevator Co., at Emma, and Sweet Springs, Mo., managed by Edwin Schelp, utilizes a unit that fits into a window when the sash is up—or down if the unit is installed in the top part of the window.

This unit consists of a large, four-blade fan mounted on the shaft of a motor which runs at varying speeds controlled by a rheostat switch, a small pump run by the same motor, a short length of hose, and a thin layer of excelsior held between two layers of heavy screen wire behind the frame. This combination of mechanical parts is mounted in a frame that is in turn mounted in a large piece of plywood sufficient to fill out the window area.

In operation the pump sprays water along the top part of the layer of excelsior, the water drains down thru the excelsior, the fan draws air from the outside thru the moist excelsior and blows it into the room being cooled. For efficient operation, other windows and doors in the room are left open so that warm air in the room that is being displaced can find unresisted passage to the outside.

This means of cooling a room economically has been used before in home made contrivances. Now such a unit is manufactured by the Leahy Mfg. Co., and distributed by the Richardson-Conover Hardware Co. It is made in various sizes, suited to almost any size window and any size room.



A Gasoline Storage Tank Converted into a Grain Storage Annex at Seward, Nebr.

Rust and Hybrid Corn Before Kansas Locals

Hybrid corn, its development and its characteristics, was a major subject before five of eight local meetings of grain dealers being held at widely separated points in Kansas, under the auspices of the Kansas Grain, Feed, & Seed Dealers Ass'n. Wheat improvement, too, commanded earnest attention in the regular programs, along with improvement of weighing facilities, and brief discussion of crop conditions.

MEETINGS held found 60 dealers in attendance at Chanute, June 3; 48 at Wellington, June 4; 47 at McPherson, June 5; 75 at Topeka, June 6, and 59 at Marysville, June 7. All were evening meetings, preceded by dinner at local hotels, or dining halls. A local ass'n officer presided at each meeting, and turned the program over to Sec'y J. F. Moyer, of the Kansas Grain, Feed & Seed Dealers Ass'n, following rotary roll call of the delegates.

Smut and Rust

DR. JOHN PARKER, Manhattan, director of the Kansas Wheat Improvement Ass'n, appeared at several of the meetings, and exhibited loaves of bread comparing the baking results from flour made from a standard mill mix of wheats, and flour made from Chiefkan wheat, leaving no doubt in the minds of the delegates as to the superiority of the standard mill mix, and of recommended varieties of wheat.

To dispel confusion on the subject, Dr. Parker described the characteristics of loose smut, and of stinking smut or bunt. He pointed out that loose smut develops inside a wheat berry, that it never creates ball smut, that hot water treatment of the seed is the only way to kill it, that this treatment of seed wheat is difficult because only two or three degrees in temperature separate the death point for spores of this smut, and the death point for the wheat germ.

STINKING SMUT, or bunt, is the form of smut that smears on the wheat berries, and constitutes the greater hazard for farmers and elevators. It creates smut balls, and earns heavy discounts in terminal markets. This type of smut, which is found commonly thru the wheat belt, is easily controlled by treating the seed wheat with two to four ounces of copper carbonate or Ceresan before seeding. Recommended treatment kills the smut spores found in the crease and on the outside of the wheat berries, but leaves the germinating ability of the seed unimpaired.

RUST, said Dr. Parker, is attracting a great deal of attention this year. He described red rust, and black rust, and made brief reference to a yellow rust which is as harmful to wheat fields in Europe as black rust is to domestic wheat.

"Black rust and red rust," he said, "are different rusts. But each may and does grow on both the leaf and stem of the wheat plant. Each has a red stage, and each turns black as it matures.

"The black rust with which we are so concerned in the new wheat crop, is now in the red stage and is spread over a wide front from east of Arkansas City, west to Attica in Kansas, and has been found in fields as far north as Manhattan."

Dr. Parker explained that moisture in heavy dews or plentiful rains, combined with high temperatures, enables the rust spores to incubate, develop to maturity and be spread by the winds in periods of seven to eight days. Cool weather retards this development to a period of 14 to 15 days. Thus there is time for spread of two, possibly three life cycles of black rust before late wheat matures, whereas early wheat will escape further attacks. When the wheat berries turn hard in the heads they are safe from rust damage. It

is during the filling stage that damage may occur.

Hybrid Corn

E. G. HEYNE, U. S. Department of Agriculture corn breeder, from Manhattan, defined and described hybrid corn. "Corn," he said, "is a complete grass. The same plant carries both male and female parts. This makes close inbreeding possible." With the aid of colored slides projected on a screen, Mr. Heyne described the process of inbreeding, and of crossing inbred lines of corn to create the double cross hybrids produced as hybrid seed corn.

A map thrown on the screen enabled delegates to visualize the locations of test plots thru the state of Kansas at which different kinds of hybrid corns are being tested.

Manhattan's experiment station, he said, does not at present make any recommendations as to varieties of hybrid corn most suited to production within the state. But it has begun publication of a pamphlet giving the yield results from different hybrids at the test plots, from which dealers may make their own deductions.

PAUL IJAMS, from the state board of agriculture, at Topeka, told of frauds in the sale of hybrid seed corn, which led to placing on the statute books of Kansas a law defining hybrid seed corn, so as to eliminate from this classification any corn picked from fields of commercial hybrid corn as seed. The standard single and double cross hybrid corn is the only kind that can be classified as hybrid seed corn under the terminology set forth in this definition.

Kansas law, he said, requires that commercial producers of hybrid seed corn register their inbred lines with the state, and that they name the inbreds combined to produce hybrid seed corn, and the arrangement of combining. Each combination of inbreds takes a single register number which is applied to such combination regardless of how many producers use this combination. Registration places responsibility for the hybrid seed produced on the shoulders of the producer. A registration may be cancelled if the variety it covers proves unsuited to Kansas conditions, or if the producers of such registration are found guilty of fraud.

The Itinerant Trucker

E. N. SUNDERLAND, of the Associated Producers & Distributors of Kansas, repeated his remarks at the Kansas state convention of grain dealers, making a plea for support of a plan for legislation to curb the itinerant trucker-merchant.

Trade Problems

SECY MOYER ran quickly thru a series of trade problems on which the ass'n is working. He pointed out that thru ass'n effort the A.A.A. is granting the bulk of earnings for elevators thru handling and storing A.A.A. and C.C.C. wheat during the first few months it is held under the new uniform warehouse agreement, and that this provision protects earnings under the demand loans which will be made by the A.A.A. to wheat farmers this year.

Loan wheat and government agency wheat may be stored in houses with either a state or a federal license, he said. The A.A.A. has been persuaded to accept the terms of the Kansas warehouse law which provides for a minimum bond of \$5,000. Under Kansas law total charges for license, bond and storage receipts up to 50,000 bus. capacity amount to \$47, because Kansas elevators enjoy a low bonding rate.

A REPORT of the federal Bureau of Standards, covering 71 Kansas scales, selected at random, and checked for accuracy, was aired. These scales included the weighing facilities of coal retailers and other trades, as well as grain dealers, and the report discovered that

27 of the scales checked were well within tolerance, while 44 were inaccurate in some degree.

SECY MOYER pointed out that data collected a year ago showed the average cost of handling grain thru a Kansas elevator to be .0383c per bu. This cost has not declined, he remarked. Any change has been upward due to increases in taxes, and costs of bookkeeping. A grain dealer is entitled to a fair margin.

A NEW SUPPLY of placards quoting Kansas law imposing penalties for sale by farmers of mortgaged grain without forewarning to the country elevator operator, has been printed and made available to Kansas dealers thru the ass'n.

A PROPOSAL that shippers provide themselves with shippers weight cards, which could be filled out and tacked in cars of grain and checked without turn weights in the terminals, found some supporters and some in opposition, was taken under advisement.

Check Testing Kettles

CHAIRMAN D. O. WANAMAKER, Blue Rapids, at the Marysville meeting, told of an inability of grain dealers in surrounding territory to arrive at the same test weights per bu. on wheat offered for sale. A check up on the accuracy of testing kettles and beams found the equipment of one dealer inaccurate, causing his tests always to run heavy. He urged each grain dealer to check testing kettles and beams for accuracy.

Sec'y Moyer added that when the country receiver places a grade on grain stored under the government's uniform warehouse agreement he must deliver the same grade of grain, and his placing of the grade must stand checking by licensed grain inspectors at terminal markets.

Each meeting closed with a showing by Sec'y Moyer of a colored movie film showing grain dealers in action, shots of the activities of itinerant trucker merchants, wind damage to steel bins in western Kansas, progress on wheat improvement thru field days and the Kansas Wheat Improvement Ass'n, and other subjects interesting to grain dealers.

All of the district meetings were liberally sprinkled with representation from Kansas primary and central markets, tributary to the district in which each meeting was held.

Washington News

The appropriation of \$918,000,000 for crop control and other activities of the A.A.A. was approved June 25 by the president.

For insect eradication and control the House has approved a supplemental appropriation of \$500,000, bringing the total up to \$3,000,000.

Sales of 600,000 bus. of Pacific Northwest wheat under the export subsidy, to Chinese importers, during the week ending July 6 were reported by the U. S. Dept. of Agriculture.

Sec. 316 of the rules and regulations under the Commodity Exchange Act has been amended to provide for reports on form 304 by persons having open contracts in cotton futures in excess of the amount fixed in Sec. 321 of Art. III.

The Surplus Marketing Administration has been created to continue the work of the division of marketing and marketing agreements hitherto under the A.A.A., and to absorb the F.S.C.C., the Delaware corporation, whose work will continue as the division of distribution and purchase. Milo Perkins heads the new S.M.A. as administrator, assisted by E. W. Gaumnitz and P. F. Maguire.

The Food Stamp plan of distributing farm products to persons on relief is to be extended to Council Bluffs, Ia.

Grain and Feed Trade News

Reports of new elevators, feed mills, improvements; changes in firms; fires, casualties, accidents and deaths are solicited.

CALIFORNIA

Huntington Beach, Cal.—The Huntington Beach Co.'s feed mill and warehouse were destroyed by fire June 12.

San Francisco, Cal.—This city has been chosen as the place for the April, 1941, annual meeting by the directors of the California Hay, Grain & Feed Dealers Ass'n.

Red Bluff, Cal.—W. H. Macy & Co. recently purchased the California Prune & Apricot Growers building and is having it repaired and remodeled for use as a public warehouse.

Oakland, Cal.—Work has started on construction of the 500,000-bu. reinforced concrete elevator with 20 bins and head house to increase the storage space of Albers Bros. Milling Co.'s feed mill here. Jones-Hettelsater Construction Co. has the contract.

Stockton, Cal.—The interest of Phil O'Connell in Schuler-O'Connell has been acquired by the Schuler family and Eugene D. Wilkinson. Application has been made for change in name of Schuler-O'Connell to Schuler-Wilkinson Grain Co. The firm was established originally in 1915 under the name of Frank A. Guernsey Grain Corp.

Stockton, Cal.—The Delta Warehouse Co. is constructing a grain cleaning and drying plant which, together with new bins recently installed, will represent an investment of about \$50,000. It is expected to be ready for use by Oct. 1, Sam Mateer, sec'y of the company, announced. Phil O'Connell, president, has severed his connection with the Schuler-O'Connell Grain Co. and hereafter will operate his own grain brokerage firm from headquarters on West Weber Ave.

Los Angeles, Cal.—Stockholders of the Globe Grain & Milling Co. will vote on July 16 on a cash offer of \$3,600,000 for the company's assets. The name of the company making the offer not disclosed, is understood to be the Pillsbury Flour Mills Co. Globe Grain was organized under California laws, in 1902, as successor to the McDonald Grain & Milling Co. and manufactures flour, hay and mill products, salad and cooking oil, lard substitutes, cottonseed oil, oil cake meal, poultry supplies and macaroni and deals in grain and fertilizer. The company owns and operates five flour mills in California in addition to a mill at Ogden, Utah, a macaroni factory at Culver City and stock yards at Hobart, Cal. It owns and operates four feed mills in California and one in Utah; also grain elevators in various towns in Utah and California, as well as many distributing warehouses.

CANADA

Winnipeg, Man.—The Gillespie Grain Co., Ltd., has taken over the business and office of the Jackson Bros. Grain Co., Ltd. The staff of the Jackson Bros. Grain Co., Ltd., will be retained and the Gillespie company will continue to operate on the same premises.

COLORADO

Hudson, Colo.—J. P. Spelts, manager of the United Elevators, Inc., elevator, has remodeled the entire elevator and installed a new hammermill.

Berthoud, Colo.—The Farmers Grain & Bean Ass'n of Denver recently purchased the Berthoud Elevator owned by L. H. Fagan and F. M. Waggener, which it has run under lease for the last several months with Mr. Waggener as manager.

ILLINOIS

Irving, Ill.—Toberman & Ware are building an elevator here.

Woodhull, Ill.—The Woodhull Grain Elvtr. Co. donated a scoreboard for the local softball diamond.

Athens, Ill.—Culver Farmers Co-op. Co. is installing a new Hall Signaling Grain Distributor in its plant.

Mendota, Ill.—The Co-operative Grain & Supply Co. has widened the dump and made other improvements at its elevator.

Belvidere, Ill.—Fay Packer, 59, employed by the Farmers Co-op. Elvtr. Co. for some time, died of a heart ailment recently.

Galesburg, Ill.—Miner E. Roberts, 78, for many years a prominent grain dealer of Mercer County, died recently. He had been ill for many years.

Hull, Ill.—D. B. Gray is building an elevator by the Wabash railroad near his present house. He also is arranging for additional storage in steel bins.—P.J.P.

Erie, Ill.—A new office has been erected at the Frank Seger elevator. The new building is 24x30 ft., with full basement, heating plant, and modern equipment.

McComb, Ill.—Handling of field wheat for 1940 crop was discussed the evening of July 5 by elevator men of Henderson, McDonough and Hancock Counties in a meeting here, at the Hotel Lamoine.

Dollville (Henton p.o.), Ill.—The S. E. C. Galster elevator was destroyed by fire the afternoon of July 1 and with it a quantity of government stored grain it contained. Cause of the fire is unknown.

Orangeville, Ill.—G. B. Goodhart has been employed as manager of the Farmers Co-op. elevator, succeeding Gene Rusk, who has accepted a position as manager of a co-operative seed firm in Freeport.

Oakford, Ill.—The Farmers Friend Grain Co., Paul Friend, owner (headquarters, Kilbourne, Ill.), has leased the local elevator of the Norris Grain Co. and appointed George Ellks manager. The firm also operates an elevator at Kilbourne.

Atterberry, Ill.—The elevator of the McFadden Grain Co. was damaged badly June 28 when a section of the west wall collapsed, spilling a large quantity of shelled corn on the ground. The walls of the elevator are of poured concrete, reinforced with steel.

Peoria, Ill.—L. J. Norton, professor of agricultural economy at the University of Illinois, discussed problems arising this year as a result of a good crop prospect and record carry-over at a dinner meeting of co-operative grain elevator officials at the Peoria Y. W. C. A. June 28.

Onarga, Ill.—Grain dealers of this section held an interesting meeting here recently when Lawrence Farlow, sec'y of the Farmers Grain Dealers Ass'n, was present and gave a talk on the subject of the Commodity Credit Contracts for 1940 and 1941. Forty men were in attendance.

Mt. Carmel, Ill.—Iglehart Bros. Elvtr. is being improved, to be ready to handle the new crop. The office building is being moved to a new location, more convenient for servicing both the elevator and warehouse and the concrete tanks are being given a waterproof coating.

Lawrenceville, Ill.—E. J. Wininger of St. Francisville has rented the building formerly occupied by the Horner Elvtr. Co., where he will carry on business as the Square Deal Grain Co. He will buy all kinds of grain and sell coal and feeds. For a number of years Mr. Wininger operated an elevator in St. Francisville, Ill.

Antioch, Ill.—The Antioch Milling Co. will start construction this month of its modern, fireproof elevator, George Wagner, manager, recently announced. The structure replaces the frame building which was badly damaged by fire several months ago. The building will have dimensions of 132x50 ft., the elevator section measuring about 50x50 ft. The exterior of the building will be in brick, while the interior construction will contain steel or asbestos sheathing. A modern store building will front on Main street, separated from the elevator by a double wall.

Morris, Ill.—The 60,000-bu. elevator under lease to the Allied Grain Corp., was sold at auction by F.C.A. recently, the Illinois Grain Corp., of Chicago, purchasing the plant on its bid of \$35,010. The Allied Grain Corp. has operated the elevator for the last two years and on June 1 contracted for the use of the house for another three years.

Lawrenceville, Ill.—Horner Grain & Coal Co. has moved to a new location in the building on So. Twelfth street formerly occupied by the Midwest Dairy. Merchandise and equipment has been moved to the new quarters and W. C. McMichael, manager, associated with the company for more than 20 years, stated the plant is ready for business.

Hermon, Ill.—The Moore & Wells elevator burned to the ground early June 25. The elevator had not been in operation during the last few weeks. Ten thousand bushels of government corn is reported to have been moved from the structure recently; 350 bus. of soybeans were said to have been in the cribs at the time of the fire. Gene Moore was the manager.

Alhambra, Ill.—Hugh Miller, 55, an employee of the Alhambra Grain & Feed Co. elevator, fractured both ankles when he fell 40 feet down an elevator shaft June 26. He was working a hand operated elevator in the plant when the cable broke, dropping the cage, himself, and load down the shaft. He will be confined for several weeks in the St. Francis Hospital at Litchfield, where he was taken immediately following the accident.

Wyoming, Ill.—The west side of the Wyoming Grain Co.'s elevator which extends over the driveway, has been raised; a concrete base has been poured and the driveway extended 14 ft. to accommodate large trucks. New supports were laid and completed, the new driveway is 56 ft. in length. New unloading equipment has been installed which includes an electric truck lift. A concrete floor is being laid in the basement of the elevator, and bins are being fitted with hopper bottoms. Two new conveyor belts, each 125 ft. long and 12 and 14 inches wide, and a loading spout are being installed also. A coat of aluminum paint on the building will complete the extensive improvement program. J. J. Abbott is manager.

CHICAGO NOTES

Carroll C. Parkhurst of Gloversville, N. Y., a member of the Chicago Board of Trade since 1901, died June 26.

John P. McHugh, of McCarthy & Scoville, and Sol Marcus, with Clement, Curtis & Co., have been admitted to membership in the Board of Trade.

Orrin S. Dowse, well known cash grain authority, has resigned as president of the Santa Fe Elvtr. Co., which he organized, and as a partner of James S. Templeton's Sons, to become manager of the grain futures department of Fenner & Beane. Mr. Dowse is a director of the Board of Trade, of which he has been in the two preceding years, first vice and second vice president. He started in the grain business with the Armour Grain Co. in 1914.

Immediately following the close of trading, July 3, in a ceremony replete with military precision and impressiveness the Chicago Board of Trade Post 304 of the American Legion presented a United States Flag to the Chicago Board of Trade. In making the presentation Commander Edw. Dean of the Post recounted the patriotic record of the Board, and requested in the name of the Legion, that the flag be posted in a prominent place on the trading floor each business day. Pres. McCarthy accepted for the Board. Preceding the presentation Miss Edith Mason, grand opera star, sang "God Bless America," and following the sounding of "To the Colors" by the trumpeter, Miss Mason sang the national anthem. Past-Commander Gus Henning was master of ceremonies.

INDIANA

Camden, Ind.—The Soy Seed Co.'s elevator is being repainted in aluminum.—A.E.L.

LaOtto, Ind.—The LaOtto Grain Co. has installed a new truck hoist in its elevator.—A.E.L.

Warren, Ind.—The Salamonie Feed Mill recently installed a new truck scale and a corn cleaner.—A.E.L.

Van Buren, Ind.—The Hoosier Grain & Supply Co. has installed a new truck scale, with 24 ft. platform.—A.E.L.

North Manchester, Ind.—A new addition is being built to the Wabash County Farm Buro elevator, size 32x34 ft.—A.E.L.

Twelve Mile, Ind.—The Farmers Elvtr. Co. has lined some bins and added supports and metal siding to its elevator.—A.E.L.

Rich Valley, Ind.—The Rich Valley Co-op. Elvtr. Co. is painting its iron clad elevator with aluminum paint.—Frank Clupper, manager.

Bennets Switch (Kokomo R.F.D.), Ind.—The Miami County Farm Buro has completed a new feed mill unit, equipped with a new hammer mill and mixer.—A.E.L.

Seymour, Ind.—The Blish Milling Co. has qualified for storage of wheat for loans thru the C.C.C. This is the first time this service has been available locally, the Blish company having the only qualified elevators in a wide area in Southern Indiana.

New Haven, Ind.—E. C. Walker, who has been manager of the New Haven-Thurman Equity Exchange for many years, has retired. Arthur Goeglein, who has succeeded Mr. Walker, has been associated with this firm as an assistant for many years.—A.E.L.

Kendallville, Ind.—The Noble County Co-op. Ass'n has opened a modern branch station here in the 110x60 ft. elevator purchased in 1935 and since remodeled and newly equipped with grinding and mixing machinery, a sheller and hammermill. Two scales, also, have been installed, one a 15-ton scale. Arnold Black is manager.

Indianapolis, Ind.—The following new members were enrolled by the Indiana Grain Dealers Ass'n recently: Silver Lake Elevator, Silver Lake; New Castle Elevator, New Castle; S. J. Alexander, Crawfordsville; A. E. Sohn Elevator, Jonesville; Boston Grain Co., Boston. The total membership of today is 523.—Fred K. Sale, sec'y.

Greensburg, Ind.—Handling of the new wheat crop and handling of the wheat to be placed under government loan were subjects of importance discussed at a meeting of mill and elevator managers thruout southeastern Indiana, held here July 2 under the auspices of the Indiana Grain Dealers Ass'n, with Fred K. Sale, sec'y, in charge.

IOWA

Griswold, Ia.—The Bailey Feed Co. has installed a corn cracker.

Garden Grove, Ia.—C. D. Smith has moved his grain offices to new quarters, up town.

Fernald, Ia.—The Federal-North Iowa Grain Co. has bot the Clark Brown Grain Co. elevator.

Dunbar, Ia.—The Dunbar Elvtr. Co. has filed amended and substituted articles of incorporation.

Leland, Ia.—Edward Severson is new second man at the Leland Farmers Elvtr. Co. elevator, succeeding Arthur Haroldson resigned, to accept a position as manager of an elevator at Rake.

Buckingham, Ia.—The Buckingham Grain Co. has completed two coal bins, 56x16x10 ft., and added a garage to the buildings at its elevator.

Somers, Ia.—The Somers Co-op. Co. has installed a new 30-ton scale at its elevator and widened its driveway to accommodate large trucks.

Paullina, Ia.—Francis F. Briggie, connected with the Farmers Elvtr. Co., and Miss Doris Heller of Vermillion, S. D., were married June 21.

Ventura, Ia.—The Farmers Elvtr. Co. has completed improvements at its elevator, among them being installation of a new motor and elevator cups.

Kellogg, Ia.—All officers of the local Farmers Elvtr. Co. were re-elected at its annual meeting. A dividend of 10 per cent was voted.—"Art" Torkelson.

La Porte City, Ia.—L. L. Froning, local grain man, purchased two farms recently in this vicinity. One farm was 160 acres, the other 120 acres.—A. G. T.

Marcus, Ia.—Floyd Graham of Lake Park, Ia., was appointed manager of the Farmers Elvtr. Co. elevator to succeed R. A. Scott.—"Art" Torkelson.

Dougherty, Ia.—The Farmers Co-operative Society, whose elevator was destroyed by fire recently, let a contract to Tillotson Const. Co. for a new elevator.

Dolliver, Ia.—O. P. Stow has installed a new platform 20-ton Soweigh Truck Dump Scale with 34x10-ft. platform, and equipped with the new style grain beam.

Manson, Ia.—The marriage of Ray Durschmidt, operator of the Manson Feed Mill, and Miss Gladys Karl of Fort Dodge will take place at Fort Dodge Aug. 11.

Madrid, Ia.—Audrey Lundahl, daughter of Carl Lundahl, local grain man, was crowned queen over a mid-summer celebration held here June 23 and 24.—A.G.T.

Klemme, Ia.—W. H. Grieman was elected president of the Klemme Co-op. Grain Co. recently. Lester Stille is sec'y-treas. C. C. Kilgore was renamed manager.—A.G.T.

Ocheyedan, Ia.—Rothmier Graves, for eight years assistant manager, has been appointed manager of the Co-operative Elvtr. Ass'n elevator to succeed L. J. Phillips, resigned.

Malvern, Ia.—Frank Zanders is new manager of the Good Grain Co. elevator. He was with the Kuncie & Nelson elevator for the last 12 years, and is well qualified for the position.

Keystone, Ia.—The Keystone Mercantile Co. has repaired its elevator, which work included fixing the dump doors, relining the grain bins and installing new distributing spouts thruout.

Williams, Ia.—The Farmers Elevator has just finished replacing its elevator cups with 10x6-inch Calumet Cups, which increased the elevating capacity about 50 per cent. Geo. Todd did the work.

Cleghorn, Ia.—Weart & Lysaght Co.'s two elevators here were sold recently to the Farmers Co-operative Co., who will use them for additional storage facilities in connection with its elevator.

Pocahontas, Ia.—The annual picnic and meeting of Quaker Oats managers and assistants and their families was held here June 22. Officials of the company from Sioux City, Cedar Rapids and Chicago were present. The picnic dinner at noon was followed by a program of sports and amusements. Edward Monaghan is manager of the company's local elevator.

Vincent, Ia.—The Farmers Co-operative Elvtr. Co. has finished putting a new foundation under the office and installing a 30-ton 10x36 ft. Fairbank Scale. Geo. Todd had the contract.

Larchwood, Ia.—The Farmers Co-op. Ass'n reported sales for 1939 of \$83,449.00, with a net profit of \$3,452.43, at its annual meeting. Two new directors were elected and Homer Osgood reappointed as manager.—"Art" Torkelson.

West Bend, Ia.—The West Bend Elvtr. Co. has constructed a modern elevator office at the north end of Main St., of hollow block with a full basement. A new 30-ton scale was installed. R. W. Jurgens is manager of the elevator.

Algona, Ia.—Clarence Mawdsley, Algona farmer, purchased the Irvington Farmers Co-operative elevator buildings and all contents at a recent sale, for \$22,000. The elevator, charter for which expired March 11, was established in 1920.

Cedar Rapids, Ia.—Mrs. Nettie Church, 51, passed away suddenly on June 28, after a few days' illness. Burial was July 1 in Linwood Cemetery. She was the wife of A. M. ("Arley") Church, operator of Lamson Bros. & Co.'s local office.

Alleman, Ia.—J. G. Fauch has retired from his position as driver of the gas wagon with the Farmers Co-operative Elvtr. Co., after 15 years' service, and has been succeeded by Robert Heggen. Wilbur Sheldahl replaces the latter in the elevator.

Badger, Ia.—L. J. Fevold, who has managed the Farmers Elvtr. Co. elevator for the past 14 years, resigned, effective July 1. He will be succeeded by Glen Pogeler, formerly manager of the Richards Elvtr. Co. elevator at Richards, Ia.—"Art" Torkelson.

West Chester, Ia.—Homer Porter has purchased the elevators of H. W. Luers and A. T. Augustine and will take possession Oct. 1. Howard Freshwaters of Keota had leased the elevators for the past year and Charles Hotle has been the manager.

Richards, Ia.—Ewald Boettcher, who formerly was assistant manager of the Farmers Elvtr. Co. of Albert City, Ia., was appointed manager of the Richards Elvtr. Co.'s elevator as of July 1, to succeed Glen Pogeler, resigned.—"Art" Torkelson with Lamson Bros. & Co.

Washington, Ia.—The new feed store of the Burr B. Bordwell Co. has opened for business. A full line of feeds will be handled and feed grinding and mixing will be a specialty. Two spiral feed mixers have been installed as a part of the modern equipment of the plant.

Iowa Falls, Ia.—Forty-two grain men attended a Western Grain Feed Ass'n meeting at the Princess Cafe, June 25. General discussion took place, after a tempting dinner, in regard to the new government storage contract which does not conform to Iowa warehouse laws. Harold "Dodd" Thiele, state ass'n sec'y, conducted the meeting, assisted by S. J. Stewart of Clarion.—A.G.T.

Fenton, Ia.—The Farmers Elvtr. Co. has purchased the Critz & Co. elevator buildings, taking possession July 1, thus adding 50,000 bus. additional capacity to its grain storage facilities. The office at the Critz & Co. elevator will not be maintained. Joe Hegebold, Critz & Co. manager, has not announced his future plans. Charles Weisbrod is manager of the Farmers Elvtr Co. elevator.

Estherville, Ia.—David Weir, 40, one of the oldest employes in line of service at the Golden Sun Milling Co. plant, was suffocated June 24, when a pile of 100-lb. bags of bone meal in the company's warehouse, fell on him. The weight of the bags, which fell on his back, doubled him over in a jackknife position. He was found there by Ora Brown, who was assisting him, who summoned help, but he was dead when his would-be rescuers had freed his body from the bags.

Paton, Ia.—Lloyd Sill, manager of the D. Milligan Co. elevator, formerly owned by the Clark Brown Grain Co., narrowly escaped serious injury recently when the brake on the man lift at the elevator gave way as he was stepping off the lift at the top of the elevator. He was gripping a cable of the 400 lb. manlift when he stepped off, and the brake giving way, trapped his arm. Fred Fox, elevator employe, fortunately was with him and released his arm before serious injuries were inflicted. No bones were broken but the forearm was badly lacerated and bruised.—A.G.T.

WHEAT STORAGE SOYBEAN STORAGE

We offer concrete storage for your convenience
in shipping into the South and Southeast.

THOMSON GRAIN ELEVATOR COMPANY
Louisville, Kentucky

Hobarton, Ia.—The Farmers Elevtr. Co. held its annual picnic recently at the Kossuth County Fairgrounds in Algona. The event was in celebration, also, of the elevator company being free of debt.—Art Torkelson.

Harlan, Ia.—About 40 grain and feed dealers from southwest Iowa attended a dinner meeting at Harlan Feed Club the evening of July 2, with Harlan Rendering Co. as host. Four such meetings were held in the state. New government regulations affecting sealed corn were discussed following the dinner. Officials present were Harold Thiele, sec'y of the Grain & Feed Dealers Ass'n, Des Moines; A. N. LaFollette, state feed inspector; Howard Stewart, of the state railway commission.

Cedar Rapids, Ia.—The Honeymead Products Co. has started construction of a 300,000-bu. storage unit, one of the largest single units of storage bins ever built in Iowa. The circular reinforced concrete bin will be 109 ft. high and 67 ft. in diameter. Jones-Hettelsater Const. Co. has the contract. Without internal bracing, the new tank will store soybeans principally, and will be completed by the end of July, according to R. P. Andreas, Honeymead manager. —"Art" Torkelson.

Dixon, Ia.—Thru the recent leasing of one mile of abandoned tracks of the Rock Island lines by the Milwaukee Railroad Co., the Dixon Elevtr. Co.'s elevator has been connected with the latter railroad company's regular line. Since abandonment of the Rock Island line thru Dixon on Feb. 1, the Dixon Elevtr. Co. has been without railroad facilities to its grain elevator and feed warehouses, being forced to truck all of its incoming and out-going commodities to the Milwaukee station in what is known as "old" Dixon.

Nevada, Ia.—Completion of the disposal of the Clark Brown Grain Co. elevators has been announced, the elevators here, at Mingo and at Valeria being taken over thru purchase by C. L. "Chet" Gifford, to be operated in the future by the Chet Gifford Elevtr. Co. The fuel business of the Clark Brown Grain Co. has been purchased by the Glen R. Newton Lumber Co. The Journals announced the sale of the Clark Brown Grain Co. elevators in Greene, Webster and Boone Counties to the D. Milligan Grain Co. recently. The Clark Brown Grain Co., which now retires from the field thru the sale of its properties, was organized in 1915 by the late Clark Brown, with a dozen or more elevators, and headquarters in Nevada. Mr. Gifford became connected with the company in 1917, when he became manager of the Fernald elevator, recently sold to the Federal-North Iowa Grain Co. After five years he was placed in charge of all the country elevators, and for the last 10 years has been general manager, sec'y and treasurer. He concludes his 23 years with the company as he becomes owner and takes over personal management of three of the properties. The main office of the Chet Gifford Elevtr. Co. will remain, for the present, in the Alderman Building. Later it will be moved to the local elevator of the company. Elmore Ritz will remain in charge of the local business, as he has been for the last 15 years.

KANSAS

Verdi, Kan.—The Farmers Elevtr. Co. has been dissolved.

Wichita, Kan.—On June 25 the Yancey Grain & Elevtr. Co. sustained a small fire damage.

Wamego, Kan.—The Wamego Milling Co. has installed new machinery for processing corn.

Osborne, Kan.—Leo Reavis of Hunter is new manager of the Robinson Elevtr. Co.'s local elevator.

Ulysses, Kan.—The George E. Gano Grain Corp. has opened its local elevator, Dan Ray manager.

Park, Kan.—High winds caused a small damage to the Robinson Milling Co. elevator on June 17.

Tyler (Wichita, R. F. D. 8), Kan.—The Tyler Co-operative Co. recently sustained a small fire loss.

Canton, Kan.—The Canton Grain Co. has repaired and improved its elevator in preparation to handle the new crop of wheat.

Beloit, Kan.—Scouler-Bishop Grain Co. has reopened its local office. The office will be located in the Dockstader building.

Scott City, Kan.—The George E. Gano Grain Corp. has given its elevators here, at Grigston and at Cimarron new coats of paint.

Solomon Rapids, Kan.—The Mitchell County Farmers Co-op. Ass'n is installing a new Hall Signaling Grain Distributor in its plant.

Plains, Kan.—The Plains Equity Exchange & Co-operative Union has put its elevator in first class condition to handle the 1940 wheat crop.

Miltonvale, Kan.—The Farm Credit Administration recently sold its local elevator to the Morgenstern-Pyle Elevtr. Co. of Salina, for \$6,610.

Lewis, Kan.—John A. Holmes, 62, for many years manager of the Farmers Elevtr. Co. elevator, died recently, following an illness of nine weeks.

Mill Post 29 (Quindaro p.o.), Kan.—The George E. Gano Grain Corp. has opened its elevator here, with Curtis Reeves in charge as manager.

Clay Center, Kan.—The Williamson Mill has reconditioned its 80,000-bu. elevator and installed new equipment, to be ready to handle the new wheat crop.

Tescott, Kan.—John Baker is the new manager of the Farmers Co-op. Ass'n's elevator. He formerly had been employed by the Farmers Elevator at Bennington.

Moran, Kan.—The Lam Elevtr. Co., operated by W. W. Lam, has installed a new electric grain dump; two concrete dump pits have been built and a rock driveway put in.

Cedar Point, Kan.—The Brunner Flour & Feed Mill has installed an electric driven grain elevator leg and an air dump; built a new office building and purchased a new truck.

Independence, Kan.—Thieves broke into the office of the Star Mill recently, stealing a dictaphone, check protector and ticket machine. No money was kept in the building.

Elkhart, Kan.—The Security Elevtr. Co. has leased the old Gamble elevator, placing Harry E. Rall, formerly manager of the company's elevator at Minneola, in charge as manager.

Duquoin, Kan.—The Imperial Flour Mills Co. has leased the Farmers Union Elevator and is prepared to handle the 1940 wheat crop thru the elevator, with E. B. "Slim" Grimes in charge of the business.

Moundridge, Kan.—The Farmers Grain Co. recently erected a 7,000-bu. storage tank at its elevator, increasing its total storage to 42,000 bus. of wheat. It also has repaired and waterproofed the roof of its elevator and given the building a coat of aluminum paint.

Phillipsburg, Kan.—The Hart Lumber & Grain Co. has opened its local elevator with Earl Cox in charge as manager. A new roof was put on the office building, a new dock was constructed at the south end of the elevator and complete commercial feed manufacturing equipment was installed. Later, the exterior of the elevator will be covered with galvanized iron.

Halstead, Kan.—The Farmers Co-operative Grain & Mercantile Co. has put a new roof on part of the west elevator and painted the structure with aluminum paint. A new metal roof is being put on the east elevator, also.

Wilson, Kan.—The B. W. Kyner Elevator held "open house" recently to celebrate the opening of its new addition, which will be used for grinding and mixing various feeds and supplements. Free lunch was served, prizes were awarded, and a band concert was enjoyed.

Feterita, Kan.—W. E. Rice, for several years manager of the Farmers Grain & Supply Co. elevator at Hugoton, recently resigned from that position and leased the elevator and equipment of the Stevens County Co-operative Equity Exchange. He will handle grain, oils, gasoline and coal.

Dodge City, Kan.—Sidney S. France, 53, manager of the local office of Wolcott & Lincoln, Inc., died June 26 from the effects of a fall down a flight of steps in the home of a neighbor. A concussion of the skull caused death. He had been employed by Wolcott & Lincoln, Inc., for 15 years.

Tescott, Kan.—The Tescott Grain & Feed Co. has purchased the Kansas Flour Mills and is remodeling the elevator and installing new machinery thruout. Handling capacity of the plant will be 2,400 bus. of wheat per hour. The company carries a full line of feeds. Max Pruett is the new manager.

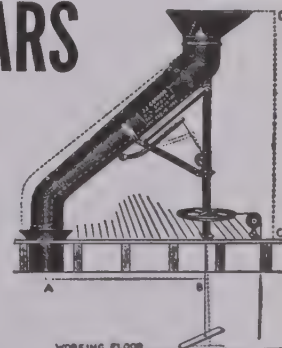
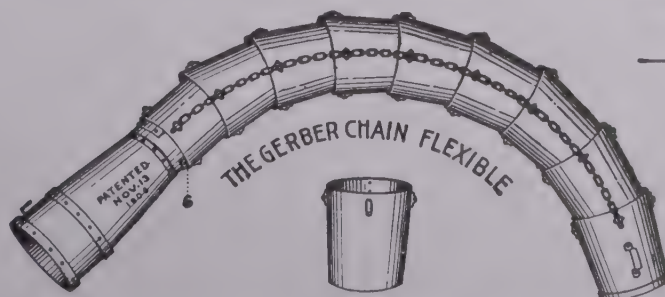
Sublette, Kan.—The McCoy Grain Co. has leased from Lemon & Barbee, of Pratt, their concrete elevator here, which, with the former company's own two elevators gives it a storage capacity of 100,000 bus. of wheat. The large elevator is an approved warehouse, eligible for storing under the government loan plan.

Shallow Water, Kan.—Lee Collingwood of Hutchinson, one of the largest producers and handlers of wheat in Kansas, was seriously injured July 1 when he fell 60 ft. from the Collingwood Grain Co. elevator which he operated. He sustained fractures of his limbs and internal injuries and was removed to a hospital at Wichita.

Fredonia, Kan.—The Midland Investments, Inc., and Union Gas System, Inc., are financing an alfalfa mill under construction on an 11-acre tract of ground south of here, on K-96, and will have the plant in operation for this season's cutting. Name or corporate form of the new plant has not been determined. The mill will have a capacity of 20 tons a day of dry meal. The main building will be 36x95 ft. in size, with several auxiliary buildings erected near by. All buildings will be of steel with concrete foundations. A large warehouse on the Frisco frontage is planned to be built next year, together with loading docks and additional facilities for storage and shipment of the finished product.

STANDARD FOR 50 YEARS

Every item in the extensive GERBER LINE of grain elevator equipment has quality built into it. This quality added to its dependability and durability has made this line standard equipment for 50 years, and assures you efficient and economical service over a long period. Gerber Spouting, long preferred by the trade, is manufactured from specially tempered steel. Insist on and get GERBER PRODUCTS.



The Gerber
No. 2 Distributor Spout

Write today
for a
free catalog
H I - 1940

J. J. GERBER SHEET METAL WORKS

518 S. 3rd St.
Minneapolis

Dodge City, Kan.—W. S. Blunt, manager of Dodge City Flour Mills, is the newly elected president of the Dodge City Board of Trade, and Fred Casterline is vice president. Newly chosen directors are D. W. Sturgeon (1 year term), J. F. Moyer and H. R. Hensley (two year terms). Mr. Moyer is sec'y of the Kansas Grain, Feed & Seed Dealers Ass'n.

Cheney, Kan.—Mrs. Theodore Willard will continue to operate the Morrison, Gregg, Mitchell Grain Co.'s elevator here, following the recent death of her husband, who was manager of the plant. She is well qualified to manage the business, having been identified with the grain trade here for the last 17 years. The elevator is being cleaned and repaired in readiness for the coming harvest.

Pratt, Kan.—The Southwest Grain Co. of Hutchinson has taken over the Montford Grain & Supply Co. elevator and filling station and is now operating them. R. E. Terry, formerly of the Home Grain Co., of Wilmore, will manage the grain and feed business, and Charles Sloan will continue to be in charge of the service station. The elevator will buy wheat and handle a full line of feeds.

Clafin, Kan.—The Salina Terminal Elvtr. Co. has improved its three elevators here by installation of new motors on the elevator head shaft. The elevator formerly owned by the Clafin Co-op. Grain, Fuel & Stock Co. has been equipped with a 10-h.p. power motor and similar motors are being installed in the Salina Terminal Elevator and in the Western Star Elevator. L. J. Merklinger is manager of the Salina Terminal Elevators here.

MARYLAND

Monkton, Md.—The old Monkton mill, which was owned and operated by J. F. Schultz for a number of years, has been closed. Mr. Schultz who is an octogenarian, has been in poor health for the last two years and is now a patient at the York Hospital.

MICHIGAN

Holland, Mich.—A new 18x40 ft. addition has been built to Haven's Store, to be used as a feed room.

Grand Rapids, Mich.—The Michigan Millers Ass'n will hold its convention here next January. Exact dates for the three-day session have not been announced.

Mt. Morris, Mich.—Fire of undetermined origin recently destroyed the Mt. Morris Lumber & Supply Co. flour mill. The 65-year-old mill had not been operated for eight years.

Tyre, Mich.—Henry Peplinski, 23, pleaded guilty recently on a charge of breaking and entering the Tyre elevator and stealing five bags of beans. He was bound over to circuit court and, unable to furnish bond, was remanded to jail.

Concord, Mich.—The Concord Milling Co. is installing two Kelly-Duplex Mixers and is overhauling its flour mill. The company, operated by W. C. and M. E. Whittecar, recently took over the Krebill Milling Co. plant, reported in a previous issue of the Journals.

Lansing, Mich.—A com'te of Michigan Bean Shippers and producers has asked the Federal Surplus Commodities Corp. to relieve a glutted market and distressed price structures for their products. The com'te claims war in Europe has destroyed a foreign market.

Cone (Milan p.o.), Mich.—Jerome Squires, who recently purchased the elevator at this station, is making some improvements, the new equipment consisting of a Sidney Combined Corn Sheller and Boot, Sidney Scalping Screen, and a Sidney Truck Hoist. The single phase motors are also being replaced with three phase motors.

St. Johns, Mich.—E. C. Smith & Son have installed a Model 11 Nickle Ear Corn Crusher ahead of their 40 h.p. attrition mill to speed up their custom grinding service.

Barryton, Mich.—Barryton Co-op. Ass'n has installed a Model 10 Nickle Single-Roll Crusher-Feeder ahead of its hammer mill. It replaces a three-roll crusher of same make. Harry Hall is manager.

MINNESOTA

Waverly, Minn.—Charles W. Cullen has purchased the Farmers Elvtr Co. elevator.

Clearbrook, Minn.—B. C. Stay is new manager of the Clearbrook Elvtr. Ass'n elevator.

Warroad, Minn.—Operation of the Landby Dehydrating Co. plant has been started.

Triumph, Minn.—Plans are being made to extensively repair the Triumph Elevator here.

Sleepy Eye, Minn.—C. P. Cutting resigned as manager of the Farmers Elevator here, effective July 1.

Clinton, Minn.—The Farmers Co-operative Elevator is installing a new scale and other equipment.

Danube, Minn.—M. B. Fenno of Wabasha has taken over the management of the Farmers Elvtr. Co. elevator here.

Hanska, Minn.—The Eagle Roller Mill Co. of New Ulm has purchased the St. Anthony & Dakota elevator here, and will use it for storage purposes.

Green Isle, Minn.—The Muelener Feed & Coal Co. has sold its feed grinding mill and feed and flour sales business here to Ray White of Aurora, Minn.

Crookston, Minn.—William Olsen was transferred here from Hendrum, Minn., local agents for F. H. Peavey & Co., formerly Monarch Elevators.

Gary, Minn.—Hans M. Flom, 56, former local manager of Cargill, Inc., died June 9 after a long illness. Mr. Flom retired as manager several months ago because of ill health.

Waltham, Minn.—Louis Nemitz has sold his elevator to the Commander Elvtr. Co. New equipment is being installed and additional warehouse space added. Ed Lee will be in charge.

Hendrum, Minn.—Nels L. Tacklind of Hatton, N. D., has been transferred here as agent for F. H. Peavey & Co. (formerly Monarch Elevators), succeeding William Olsen, transferred to Crookston.

Wilmont, Minn.—The Farmers Elvtr. Co. has purchased the two local elevators owned by John E. Greig & Co., Estherville, Ia., taking possession July 2. Oscar Young has been retained as manager.

Mankato, Minn.—N. B. Fitzgerald has been elected president of the Hubbard & Palmer Co., succeeding the late Frank E. Crandall. C. A. Pepper has been chosen vice-pres. and sec'y and F. C. Daniels, treasurer.

Ivanhoe, Minn.—The Farmers Independent Elvtr. Co. will erect another building and install necessary equipment to house a grain cleaning plant with units for scarifying clover and alfalfa seed, and also for the treatment of all kinds of seed grains.

Garfield, Minn.—The Valley Mercantile Co. is erecting a small elevator for grain handling, and will be ready to operate soon. All equipment in the new plant is being supplied by R. R. Howell Co., including motors, grates, power transmission, spouting, etc.

Emmons, Minn.—The Speltz Grain & Coal Co. has purchased the local elevator from Henry Schewe and the Hoveland Bros. Carey E. Peterson, who has been the local manager for the grain company for a number of years, will continue in the same capacity.

Leroy, Minn.—LeRoy's new fiber mill was dedicated June 22 and to celebrate the occasion the whole town celebrated. Flags decorated the main street; the school band marched and played, while the town officials, R. W. Hathaway, manager of the mill, and various officials of the Clear Flax Mill spoke.

Olivia, Minn.—The Windhorst Elevator is being completely remodeled. New equipment is being installed, including Howell Roller Bearing Boot and Head, Howel Direct Connected Geared Head Drive with 5 h.p. Fairbanks Motor, Howell Distributing System and Calumet Cups. The J. H. Fisch Co. has the contract.

MINNEAPOLIS LETTER

Otto Paulson, formerly of Havre, Mont., has been transferred to Minneapolis by the International Elvtr. Co., with whom he is employed.

H. K. Chidlaw, general superintendent of the International Elvtr. Co. in Minneapolis for 43 years, recently was guest of honor at a farewell dinner tendered him by officials and employees of the company, before his retirement from the position July 1.

Thomas Smith Amidon, 77, of Daytona Beach, Fla., a prime mover in the development of Cream of Wheat cereal, died recently in New York, N. Y., after an emergency appendectomy. Mr. Amidon, who retired as production manager of the Cream of Wheat plant in Minneapolis two years ago, was stricken while visiting in Newport, Conn.

MISSOURI

St. Joseph, Mo.—The old Hauck Milling Co. plant, idle for many years, is being razed.

West Plains, Mo.—Henry Moore, 98, a partner for many years in the Pease-Moore Milling Co., died recently.—P. J. P.

Golden City, Mo.—The Morrison, Gregg, Mitchell Grain Co. suffered a severe loss at their elevator from high winds on June 6.

Butler, Mo.—M. F. Arnold has installed new unloading and weighing facilities at his elevator in preparation for the grain season.—P. J. P.

Washington, Mo.—The receiving pit at the M.F.A. elevator has been rebuilt large enough to hold a full load of wheat. Maurice Maze is manager of the plant.—P.J.P.

Mexico, Mo.—John Raymond Harper, 38, manager of the W. W. Pollock Milling Co., mill and elevator for 12 years, died June 15 in the Missouri Baptist Hospital in St. Louis, following a major operation performed June 6.—P.J.P.

Sturgeon, Mo.—H. J. Sonksen has purchased the Sturgeon elevator and equipment. Mr. Sonksen purchased the stock of feed in the elevator from C. L. Harper in 1938 and Dewey Roberts has been manager of the elevator since that time.

New Florence, Mo.—W. E. Bush, 69, owner of the New Florence Milling Co. until two years ago, died recently following a long illness. Mr. Bush spent his lifetime in the grain and milling business, first at Americus and later at New Florence.—P.J.P.

Montgomery City, Mo.—Tom Sanders and his wife, Beatrice, of Belle, Mo., were arrested June 21 and charged with passing forged checks. Among the victims was the Prairie Milling Co. Both waived hearing, and unable to furnish bond, were sent to jail.—P.J.P.

Fulton, Mo.—The Alexander Hardware Co. has bot the grain warehouse of the S. R. Yanits Milling Co., and it has been approved for a grain storage by the government. The 40,000-bu. elevator is being repaired, and in addition to wheat, corn will be stored there.—P.J.P.

La Plata, Mo.—The warehouse of the Farmers Exchange, owned by Mrs. Pearl Long of California, was destroyed by fire recently. Among articles lost were a feed grinder, corn sheller, mill, miscellaneous stock and a quantity of feed. Mr. Begole is manager of the business.

Dexter, Mo.—Wilbur T. Bowman, 65, formerly a resident here when he was superintendent of the Scott County Milling Co. plant, died, recently, in San Francisco, Cal., where he had resided for the last 20 years. He was a brother of Judge W. C. Bowman of Sikeston, who established the Scott County Milling Co.—P. J. P.

St. Louis, Mo.—An award of \$37,500 was made by a jury in Federal Court recently, for the old Merchants Exchange Building, owned and occupied by the Prunty Seed & Grain Co. The building was built in 1857 and remodeled in 1929. The condemnation commission awarded \$39,670 for the building and site, but both owners and government excepted to the award.—P.J.P.

CLELAND Grain Cleaners

will do the cleaning job you need, for clean wheat, oats, corn, barley, rye, beans, flax and seeds, with ONE cleaner.

Largest Capacity Lowest Price
Write for full information about
these Modern Cleaners.

Cleland Mfg. Co.

Established 1824 Minneapolis, Minn.

KILL WEEVIL

with LETHOGAS, a fine fumigant approved by Mill Mutual Fire Prevention Bureau.

Order 5 - 15 - 30 - 55 Gallons.

Parsons Chemical Wks., Grand Ledge, Mich.

Salisbury, Mo.—Thomas H. Edwards, former president of the Salisbury Milling Co., is in a critical condition at Woodland Hospital, suffering from a self inflicted bullet wound in his chest above the heart. He has been in ill health for the last six months.—P. J. P.

Clarence, Mo.—The old office building of the Clarence Grain Co. has been moved from a site north of the elevator to a position east and converted into a grain storage room. About a year ago the company built a modern office, equipped with a 35-ton Howe Scale. C. E. Benson is manager.—P. J. P.

Wright City, Mo.—Irvin Klausmeyer has been appointed manager of the Farmers Elevator, succeeding Herman Koopmann, resigned. Mr. Klausmeyer has been in the employ of the elevator for 17 years. Mr. Koopmann, who served efficiently in this capacity for 21 years, will remain in the elevator as bookkeeper and sec'y for the Board of Directors.

Sweet Springs, Mo.—The 70,000-bu. reinforced concrete elevator of the Emma Co-operative Elvtr. Co., locally managed by Herbert Schelp and used principally for storage purposes, has been improved in recent months by installation of a new leg belt, new buckets, and spouting. A cooling device has been installed in the office, a fan that sets in the window and draws air thru water running over excelsior packing in a screen.

KANSAS CITY LETTER

P. A. Kier has been elected to membership in the Kansas City Board of Trade.

Harold A. Hantz is now superintendent of the Missouri Pacific elevator "B" now operated by the Standard Milling Co.

David L. Croysdale, a former member of the Kansas City Board of Trade, died June 19. His father, the late W. E. Croysdale, was a charter member of the exchange.

Victor A. Cain, 61, head of the old Cain Bros. Milling Co. in Kansas City, and widely known in grain circles of this area, died of a heart ailment June 30, after an illness of six weeks.

Work has started on the new pop corn plant of the Burch Mfg. Co. at Kansas City. All mechanical equipment is being supplied by R. R. Howell Co., and includes conveyors, spouting, power transmission, buckets, chain drives, head drives, master gear head motors and a Howell Overhead Electric Truck Lift. The Younglove Construction Co. has the contract.

MONTANA

Flaxville, Mont.—The International Elevator Co. elevator is being repaired and painted with aluminum paint.

Dutton, Mont.—High winds caused a small loss when damage was incurred at the Dutton Co-op. Ass'n elevator in June.

Scobey, Mont.—The International Elvtr. Co. closed its local elevator July 1 as part of a consolidation move. M. L. Buckland, auditor for the company, announced.

Great Falls, Mont.—Among the speakers and discussion leaders participating in the sessions of the seventh annual meeting here of the Farmers Co-op. Elvtr. Ass'n and the Farmers Co-operative Oil Companies, June 18 and 19, were J. T. Kelly, state commissioner of agriculture; W. S. Gregoire of Havre, vice-president of the group; H. D. Rolph, president of the Montana division of the Farmers Educational & Co-operative Union of America; Dr. R. R. Renne, head of the department of agricultural economics, Montana State College; A. W. Ricker of Minneapolis; A. E. Kathan of Brady, sec'y-treas. of the ass'n.

NEBRASKA

Crete, Neb.—Floyd Rector, 35, employed by the traffic department of the Crete Mills, was drowned in the Blue River June 23, when his boat capsized.

Lodge Pole, Neb.—P. E. Smith recently added a storage room to his grain elevator.

Belvidere, Neb.—Bert Pike, who ran the elevator here for several years, died recently of cancer.

Red Cloud, Neb.—The Red Cloud Milling Co. reported a small loss recently sustained at its plant from high winds.

Madrid, Neb.—The Pikes Peak Grain Co. is building an addition to its local elevator, the new structure to be 30x30 ft. in size, adding 12,000 bu. to the company's storage capacity.

Wilcox, Neb.—The Wilcox Grain Co. closed its doors July 1. The business has been operated by Oscar Smith of Keene, under the management of L. E. Sanders, for a number of years.

NEW ENGLAND

Winterport, Me.—The grist mill formerly owned by B. R. Chandler of Bangor, Me., and later taken over by a Bangor bank, was destroyed by fire June 18. The old landmark once run in connection with a grain warehouse, had been idle and empty in recent years.

NEW YORK

Buffalo, N. Y.—An overheated motor in a conveying system at the Rex Grain & Milling Co. caused damage estimated at \$500.—G. E. T.

Cazenovia, N. Y.—Albert Jay Wright, pioneer in Buffalo's grain business, died in his home July 2, after a short illness. He was 81 years old. He began his business career in the offices of Preston & Wright, then engaged in the banking and grain business. Mr. Wright was a member of the Chicago Board of Trade since 1890.—G. E. T.

Buffalo, N. Y.—The Marin Sales Corp., for the distribution and merchandising of feedstuffs and allied products, has started operation in the Chamber of Commerce Building, Sheldon Lattin, formerly head of Sheldon Lattin, Inc., is president of the company, and Mrs. B. B. Held, also formerly with Sheldon Lattin, Inc., is sec'y-treasurer.

NORTH DAKOTA

Hatton, N. D.—C. E. Thurnau of Lankin is new manager of the Monarch Elvtr. Co. elevator.

Sarles, N. D.—The Cargill, Inc., elevator was destroyed by fire originating in the cupola recently.

Clifford, N. D.—Ed. Collins has been transferred here from Egan, S. D., by Cargill, Inc., to manage its local elevator.

Carrington, N. D.—M. F. Walsh has reopened the Independent Elevator for business. A new 15-ton Fairbanks Scale has been installed.

Larson, N. D.—Fairview Mill Co., Minneapolis, has installed a new Soweigh 20-ton Truck Scale, with 26x9-ft. platform, at its local elevator.

Harvey, N. D.—The Farmers Elvtr. Co. is equipping its feed plant with a Howell Perfection Feeder, Scalper and Magnetic Separator, a 48-inch Howell Cyclone Feed Collector and Calumet Cups.

Mooreton, N. D.—The Farmers Elvtr. Co. is installing new equipment in both elevators, including Atlas Bucket Belts, Calumet Cups, Howell Boots and Head Pulleys, and Howell Distributor Systems and Spouting.

Sykeston, N. D.—Gilbert H. Johnson, 64, well known in this locality among grainmen, having managed elevators from 1925 to 1940 in Kelso, Adrian and Sykeston, died at Jamestown, N. D., June 18. He was employed by the Lake Preston Milling Co., at Lake Preston, S. D., at one time and from 1909 to 1921 was manager of the Farmers Elvtr. in Erwin. He then returned to Lake Preston as manager of the Lunde elevator for several years.

Valley City, N. D.—Nels A. Johnson has retired as manager of the local Russell-Miller Milling Co. elevator, and is succeeded by H. C. Bjerke.

Bottineau, N. D.—The Farmers elevator property here has been purchased from Oscar Helgeson by the Carbury Farmers' Union Elvtr. Co. Joe Johnson will continue as manager.

Park River, N. D.—M. C. Adams has been named manager of the newly acquired Farmers Union elevator here, recently purchased from Lars Hylden. Adams has managed the Cargill elevator for several years.

OHIO

Columbus, O.—Farm Buro Co-op. has installed a new Kwik-Mix Mixer.

Kipton, O.—Robert Zorn, who has been identified with the Seaman-McLean Co. elevator for the last five years, has become manager of the Kipton Elvtr. Ass'n elevator.

Kingsway (Fremont p. o.), O.—The elevator of the Peoples Elvtr. & Supply Co. of Fremont was destroyed by fire July 2, including all contents. The blaze started in the cupola.

Wooster, O.—New equipment installed by Tyler Grain & Fertilizer Co. includes a Model 10 Nickle Ear Corn Crusher. This crusher feeds a No. 30 Blue Streak Hammer Mill. A diesel engine furnishes the power.

Edgerton, O.—The Williams County Farm Buro has installed a sheller and boot, new style revolving screen cleaner, truck hoist, hammer-mill feeder, drag, and motors, furnished by the Sidney Grain Machry. Co.

Columbus, O.—The following new members have been enrolled by the Ohio Grain, Mill & Feed Dealers Ass'n: Hockman Grain & Feed Co., Madison Mills, and W. F. McConnell & Co., Cincinnati.—W. W. Cummings, sec'y.

Westville, O.—E. F. Higgins, Concord Township, has been made manager of the Westville Grain & L. S. Co., to succeed W. W. Offenbacher, the manager for many years, who died recently of injuries received in an automobile accident.

Ashtabula, O.—The Farm Service Co. recently installed a motor driven Nickle Two-Roll Ear Corn Crusher with V-belt drive. The crusher is equipped with safety shear pin protection against tramp metal, and flow control for feeding 50 h.p. hammer mill.

West Mansfield, O.—The West Mansfield Elevator has remodeled its house, covering it completely with sheet metal; added new storage space, and installed a new crushing unit purchased from the Sidney Machry, Co. The elevator is owned and operated by L. W. Tamplin.

Maumee, O.—Harold Anderson has moved his office to the new Anderson grain elevator and has taken complete charge of both units, the Continental Grain Co. having completed its lease on the old elevator the end of June. The 2,000,000-bu. new elevator was ready for use and in operation July 9.

Yost Station (Glenford p. o.), O.—H. G. Roberts & Son have purchased the Yost Elevator here and the B. & O. Elevator at Thornport, and will enter the field of buying and storing grain at this harvest time. The elevators are being re-conditioned and will be in operation as soon as improvements are completed.

LIBERTY GRAIN BLOWERS

fill cars to capacity without inside scooping in 1½ to 2 hours. Saves expense of scooping labor, and loads more cars per day. Easily moved from place to place. The only thing for loading cars on R.R. spurs. Write for particulars.

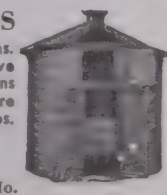
Midwest Steel Products Co.
728 X Delaware, Kansas City, Mo.



MIDWEST GRAIN BINS

answers your surplus storage problems. 5 sizes, 500 to 2250 Bu. Easy to move or erect. Extra profit also selling bins to your farmer customers who require farm storage. Also steel Corn Crib. Write for particulars.

Midwest Steel Products Co.
728 X Delaware, Kansas City, Mo.



STRATTON GRAIN CO.

MILWAUKEE, WIS.

CHICAGO, ILL.

SPRINGFIELD, O.

ST. JOSEPH, MO.

NEW YORK, N. Y.

MILL FEEDS — FEED PRODUCTS — BY-PRODUCTS

Consignments and Future Orders Solicited

Plymouth, O.—T. J. Ratcliffe of Evanston, Ill., has reopened the D. W. Einsel elevator, which has been closed for a year. The entire plant has been overhauled and repaired, the grinding mill and motor have been reconditioned and custom grinding will be a specialty. Mr. Ratcliffe was connected with the dairy business in Evanston.

Shreve, O.—The Shreve Milling Co. elevator under the management of Harold Gerber is undergoing extensive remodeling. A large corn crusher and grinder complete with cob elevator has been installed, more than tripling the former capacity of the plant. In addition a large wheat pit with equipment capable of handling grain up to 500 bus. per hour has been installed.

Latty, O.—Fire caused by the burning out of an electric motor early June 29 gutted the Saunders Mills, Inc., alfalfa mill. J. Lee of Toledo, official of the company, stated replacement machinery would be brot here at once and normal operations would be resumed within a few days. The building was of frame construction covered with corrugated iron. An explosion that occurred in a dust bin during the fire, caused no damage except to the bin.

Xenia, O.—Maynard Williams who recently resigned as manager of the Beam Supply Co. elevator at Port William, recently obtained a 15 year lease on property owned by J. P. Bocklet on W. Main St., and will construct a locker storage plant there. A one-story addition of frame construction will be built in the rear of the present building there to accommodate 400 cold storage lockers. Earl Murray was awarded contract for the plant, which is expected to be ready for use by Aug. 1.

Lima, O.—The Ohio Grain, Mill & Feed Dealers Ass'n will hold its fall meeting here about the middle of September. Several speakers will be on hand to give interesting information. The one-day meeting will start with a noon luncheon followed by speakers and several discussions on matters of general interest to the trade. W. W. Cummings, sec'y of the Ass'n, promises a meeting of special interest and importance. The condition of new corn and soybeans will be reported on by those present.

OKLAHOMA

Yewed, Okla.—John H. McCrady sustained a small fire loss in his elevator recently.

Cyril, Okla.—L. Fulton is new manager of the Farmers Union Gin and Elevator business.

Geary, Okla.—The Geary Milling & Elvtr. Co. has had its charter amended and extended.

Ardmore, Okla.—The offices of the Ardmore Milling Co. have been completely remodeled.

Marland, Okla.—The Bliss Co-operative Grain Co. has had its charter amended and extended.

Tuttle, Okla.—The J. B. Johnson Grain Co., Enid, has taken over the old Farmers Elevator and Claude McGee will operate it as manager.

Hennessey, Okla.—C. O. Geist of Cherokee, Okla., has accepted a position as bookkeeper with the Farmers Elvtr. & Co-op. Ass'n. F. E. Grim is manager of the elevator.

Vinita, Okla.—W. O. Dillon is constructing an elevator on the site of the one recently destroyed by fire. He stated he would build an elevator as near fire proof as possible. Fire has twice destroyed his plants.

Buffalo, Okla.—The Beeman-Berryman elevator has been re-opened by the Enid Elvtr. Corp. Jim Lutz will continue as manager. The elevator was closed June 1 with the termination of the Enid firm's lease.

Aline, Okla.—The grain elevator recently constructed along the Rock Island trackage is being operated by the A. R. Hacker Grain Co., of Enid, with J. D. Hacker in charge as manager. A. R. Hacker has been in the grain business about 38 years.

Drummond, Okla.—The Drummond Co-operative Elvtr. Co. has had its charter amended and extended for 20 years.

PACIFIC NORTHWEST

Peck, Ida.—Walter M. Nelson has been elected manager of the Peck Grain Growers elevator.

Lewiston, Ida.—The F.C.A. received bids until July 1 on the sale of its local 125,000-bu. concrete elevator.

Snake River (Sugar p.o.), Ida.—Lewiston Grain Growers has equipped its local elevator with a Howell Electric Overhead Truck lift.

Moro, Ore.—The Moro Grain Growers, Inc., has completed a 60,000-bu. addition to its local elevator, bringing total capacity here to 150,000 bus.

Ersine (Moro p.o.), Ore.—The Moro Grain Growers, Inc., has completed an 80,000-bu. elevator here to replace the one that burned recently.

Endicott, Wash.—The Wheat Growers are remodeling their warehouse, converting a flat house to provide facilities for 80,000 bus. of bulk grain.

Waverly, Wash.—The H. F. Kirk Grain Co. is building a grain elevator, 36x36 ft., with 50,000 bus. capacity. It will have nine bins. John Fess is the contractor.

Starbuck, Wash.—The Columbia County Grain Growers is building an annex to its large elevator, constructed last summer. Hogenson Const. Co. has the contract.

Arco, Ida.—The Sun Valley Milling Ass'n, Inc., has started operations of its local mill again. The managing personnel has been reorganized; C. G. Nixon is general manager.

Colfax, Wash.—The Colfax Grain Growers are including Howell Roller Bearing Boot and Head, Howell Safety Man Lift, and Richardson Automatic Scales in their new elevator.

Hay Canyon (Klondike p.o.), Ore.—Moro Grain Growers, Inc., is increasing its grain storage capacity here to 120,000 bus. by the construction of a 30,000 bus. addition to its elevator.

Pendleton, Ore.—The Collins Flour Mills, including mill building equipment and trademarks, have been sold by Henry W. Collins, Portland, to the General Foods Corp., who leased the mill four years ago. R. M. Crommelin continues as manager.

Prosser, Wash.—E. W. Fry has increased his wheat handling capacity by construction of three loading bins beneath an overhead drive substantially constructed, 12 ft. high and long enough to accommodate three trucks at a time, built on property adjoining his Hay Mill, that he purchased recently. Mr. Fry also has a 60,000-bu. elevator at Whitstran.

Lapwai, Ida.—The additional elevator unit for Lewiston Grain Growers, Inc., has been completed. The added structure is 100 ft. long, 40 ft. wide with 22 ft. high bins. J. W. Shepard manager, stated it increases the storage capacity from 60,000 bus. to 125,000 bus. New machinery has been installed, which includes a Howell Electric Overhead Truck Lift.

Rupert, Ida.—The D. L. Carlson Seed & Coal Co. is moving the former Hawkins elevator, owned by the firm for a number of years, to the site of the company's new unit on trackage, making a total trackage of 206 ft. for the Carlson company. It is expanding its warehouse facilities, also, by construction of a new 60x120-ft. unit adjoining its present location.

Kendrick, Ida.—The old Vollmer-Clearwater Co., tramway, one of the old Potlach country landmarks, now the property of the Lewiston Grain Growers, is being torn down. This once valuable piece of equipment over which thousands of tons of grain came down annually in former years, has outlived its usefulness with the advent of good highways and trucks. One mile and an eighth of cable formed its bucket brigade.

Busby (Pullman p.o.), Wash.—The Pullman Grain Growers has started work on its new elevator. All machinery is being supplied by R. R. Howell Co., Minneapolis, and includes a Howell Aero-Flex Telescoping Pneumatic Truck Lift, Howell Roller Bearing Boot, Howell Direct Connected Geared Head Drive with Fairbanks Motor, Howell Verti-Lift Distributor with steel spouting, Atlas Bucket Belting, and Calumet Cups. W. J. Morrell has the contract.

Seattle, Wash.—New members recently enrolled in the Pacific Northwest Feed Ass'n, Inc., include the following: S. Batali & Sons, J. J. Chisholm Grain & Feed Co. Farmers Feed Co., The Feed Bin, Fairview Feed Co., Empire Way Feed Co., Ted Hardell, Mason Lumber & Feed Co., Monroe Feed Co., Vic E. Nelson, Poultry Shipping Co., Richards Cash Feed & Fuel Co., Ward Rugh, Triangle Milling Co., Walla Walla Mill Co., and W. Wickland.—J. G. Wilson, mgr.

Spokane, Wash.—Ted Brasch, for three years sec'y of the Pacific Northwest Grain Dealers Ass'n, Inc., has resigned from the office to take up his duties as manager of the Nezperce Rochdale Co., at Nezperce, Ida., an appointment announced July 1. Thru Mr. Brasch's efficient efforts, the Ass'n has made noteworthy progress and he carries with him to his new position the heartiest best wishes of his hosts of friends thruout the grain trade of the Pacific Northwest.

Lind, Wash.—The Union Elvtr & Warehouse Co. is remodeling its elevator, getting ready for the harvest. All warehouse space in the large building formerly used for sacked grain is being utilized in the building of storage bins for bulk wheat, ten of them, thus increasing the storage capacity of the structure by 90,000 bus. The cupola is being raised 30 ft. to provide gravity distribution of grain to the extreme ends of the building. New machinery of latest type will replace that formerly used. A. J. Urquhart is manager of the elevator.

Vancouver, Wash.—The Great Western Malting Co. let the construction contract for its 350,000-bu. malt storage elevator to the George Buckler Co., and construction will start as soon as final arrangements to lease additional land are completed, which will be within a few days. William Einzig, general manager of the malting company, has announced. The structure will consist of 18 storage bins 110 ft. high in parallel rows of nine each, topped by the cupola. Four of the bins will be subdivided into four compartments each. A sacking shed will be constructed at the west end, approximately 46x40-ft. in size.

Seattle, Wash.—The old West Seattle Elevator, a landmark on the waterfront for half a century, was vacated by Cargill, Inc., at the termination of the grain company's lease on the house July 1. The company had occupied the structure since 1936. The building, owned by the Northern Pacific Railway, may be razed. Cargill, Inc., opened offices in Second Ave. Building for the present and will not maintain grain storage facilities in Seattle for the present. Joseph H. Cunningham is the company's local manager. The West Seattle Elevator is largely a sack-grain warehouse, and has become obsolete, it was stated.

Seattle, Wash.—Leasing of the Port of Seattle's grain-elevator facilities at the Hanford Street Terminal for a year to the Kerr, Gifford & Co., Inc., of Portland, Ore., a transaction which it was predicted will bring a large revenue to Seattle for labor, power, light and transportation, is announced by Col. A. H. Bickford, general manager of the Port, and A. G. Tuohy, representative of Kerr, Gifford & Co. The Hanford Street Terminal has facilities for the storage of 1,300,000 bus. of grain. This is the first time any large, old-time grain shipping interests of Portland has arranged to ship grain and grain products thru Seattle.—F.K.H.

Lexington, Ore.—The Morrow County Grain Growers, Inc., appointed D. W. Glasgow of Tekoa, Wash., as manager succeeding G. J. Ryan who recently resigned after holding that position since 1937. Mr. Glasgow, who has been associated with the North Pacific Grain Growers, Inc., for nearly seven years, of which company the Morrow Grain Growers, Inc., is an affiliate, took over his new duties July 1. The Morrow County Grain Growers, Inc., at its recent meeting, completed payment to the Ione Elvtr. Co. and took over the company's property at Ione, which includes elevator and warehouse buildings at Ione and McNab Siding.

Scoular-Bishop Grain Co.

GRAIN MERCHANTS

KANSAS CITY WICHITA OMAHA

Official Brown-Duvel
MOISTURE TESTERS
Tag Heppenstall Moisture Meters
and a complete line of grain and seed testing equipment. Every item guaranteed up to government specifications.
HARRY B. OLSON 211 W. Wacker Drive
CHICAGO, ILL.

Cornelius, Ore.—Smith DeFrees Feed Co. is equipping for bins for the bulk handling of grain with storage capacity of 200 tons. A new cleaner has been installed.

Spokane, Wash.—Centennial Flouring Mills dedicated its new \$1,000,000 two-unit plant covering 13 acres, June 28. Its mill has a daily capacity of 1,500 bbl. Construction of the 454,000-bu. grain storage unit of the plant was started last year. It consists of 119 bins in the mill and elevator sections. The old 200,000-bu. capacity elevator will be used for storage of bulk and sacked wheat. Hoyt M. Wilbanks, manager, stated all office equipment of the plant has been installed in the new quarters and full operations of the plant started June 20. The old mill is practically deserted except for some grain and flour stored there. Centennial Flouring Mills Co. operates 87 grain elevators and warehouses thruout the wheat districts of the Inland Empire, with a combined capacity of 6,500,000 bus. The new mill is described by milling engineers as "the most advanced flour mill ever built."

Tekoa, Wash.—All the property and facilities of the Tekoa Wheat Growers, Inc., have been sold to the Mark P. Miller Milling Co., of Portland, including the mill and office building, a 65,000-bu. grain elevator and two warehouses, a 40,000-bu. elevator and warehouse at Lone Pine, and the lease on the new warehouse at Tilma, all having a capacity of about 200,000 bus. of bulk and sacked grain. The new owners took possession of the property and business on July 1, at which time the Wheat Growers went out of active participation in the grain business. It also was reported but not officially announced as yet that the Miller Co. has purchased the Tilma elevator of the Palouse Grain Co., built last year. The Mark P. Miller Milling Co. is one of the largest grain and milling concerns in the northwest. D. W. Glasgow, manager for the Tekoa Wheat Growers for the past year as well as sec'y and treasurer of the company, has accepted a similar position with a similar organization at Heppner, Ore. In addition to buying, selling and storing grain, the Tekoa Wheat Growers, Inc., had engaged in the cleaning and treating of seed grains, and a general feed business.

PENNSYLVANIA

Albion, Pa.—New equipment in the custom feed grinding plant of J. W. Johnson & Son includes a Model 24 Nickle Crusher-Feeder installed to feed their hammer mill. This ball bearing crusher replaces a former model of same make that had bronze bearings.

New Castle, Pa.—John S. Brown's Son has installed a Model 24 Nickle Hammer Mill Feeder equipped with flow control, safety shear pin protection against tramp metal, and V-belt drive. A similar unit has also been installed in firm's custom feed grinding plant at New Wilmington, Pa.

SOUTH DAKOTA

Parkston, S. D.—The Farmers Elvtr. Co. is erecting a 24x40 ft. feed and flour shed.

Sioux Falls, S. D.—James H. Glow, who has been associated with the H. F. Shepherdson Grain Co. for the past eight years, died recently.

Columbia, S. D.—Theodore Schultz has been transferred here from Blunt, S. D., by the National-Atlas Elvtr. Co., to manage the company's local elevator.

High winds recently damaged elevators of the following South Dakota companies: Potter Garrick Co., Inc., Beebe; Murdo Elvtr. Co., Murdo; Okaton Grain Co., Okaton.

Blunt, S. D.—Roy Kneisel of Winifred, S. D., replaced Theodore Schultz as manager of the National-Atlas Elvtr. Co. elevator, the latter having been transferred to Columbia, S. D.

Reville, S. D.—A complete remodeling program is under way at the Farmers Elevator. New equipment being installed includes a 24-inch motor mounted attrition feed mill, Howell Direct Connected Geared Head Drive with Fairbanks Motor, safety man lift, rubber covered bucket belting, Calumet Cups, Aero-Flex Telescoping Pneumatic Lift, and a Howell Distributing System with steel spouting.

Egan, S. D.—Francis DeLay, who has been bookkeeper for the last six years for the Farmers Union Elevator, has been appointed manager of the Cargill, Inc., local elevator, succeeding Ed. Collins, transferred.

Howard, S. D.—The Farmers Union Co-operative Ass'n has ready for operation the elevator moved from Bard to the site of the former Boorman Elevator, recently demolished. Julius Knudson is manager of the company's local plant.

McLaughlin, S. D.—W. E. Kurle and the Hixon-Gannon Co., of Minneapolis, have purchased the Krause elevator with its machinery and equipment. Mr. Kurle took possession and opened the elevator July 1 for handling grain, feed, flour, seed and coal. He has had considerable experience in the grain business as an elevator man.

Conde, S. D.—The 21 grain elevators between here and Akaska, S. D., will find themselves without rail facilities by the abandonment by the Minneapolis & St. Louis Railroad of its 102.8 miles of line between the two points, as authorized by the Interstate Commerce Commission on June 26. The I.C.C. said that neither the present nor prospective volume of traffic was sufficient to warrant retention of the line, and that truck transportation, altho more costly, would meet the needs of all industries on the line except the elevators. Stations affected by the move are Conde, Adelaide, Brentford, Mellette, Northville, Chelsea, Cresbard, Wecota, Norbeck, Onaka, Tolstoy, Hoven, Lowry and Akaska.

SOUTHEAST

Harrisonburg, Va.—The Valley Hardware Co. feed mill was slightly damaged by an exposure fire on June 22.

Youngsville, N. C.—Capitalized at \$50,000, the Green Milling Co. has been incorporated to conduct a general feed, flour and meal manufacturing business.—L. D. B.

Saluda, S. C.—The Red Bank Roller Mills has been sold by Loami Able to L. C. Rankin, who will also operate an up-to-date feed mill. Equipment has been modernized.—L. D. B.

Jacksonville, Fla.—John D. Baker of Baker & Holmes Co., clerk of the civil and criminal courts of Duval County, Fla., of which Jacksonville is the county seat, is well known to the grain trade of the country, having been a vice-president of the Grain Dealers National Ass'n (now the National Grain & Feed Dealers Ass'n), in 1916-1918, during which period E. C. Eikenberry was president.

TEXAS

Electra, Tex.—The Texas Feed Mill & Elvtr. Co. is out of the grain and feed business. Edward Schlafke, owner of the property and operator of the company, has leased the mill and elevator to the Economy Cash Feed Co., H. E. Wilson, manager, who took charge of the property May 20.

Fort Worth, Tex.—The Transit Grain Co. is installing a new Hall Signaling Grain Distributor in its plant.

Coolidge, Tex.—The Bennett Trading Co. has installed new grain bins with a 12,000-bu. capacity. Trucks will unload directly into conveyors running into the storage facilities.

UTAH

Ogden, Utah.—The Ogden Grain Exchange elected the following officers at its recent annual meeting: Sterling H. Nelson, of S. H. Nelson Co., pres.; P. J. Farrell, P. J. Farrell Grain Co., 1st vice-pres.; Elwood Williams, Farmers Grain Co-op., 2nd vice-pres.; Lloyd C. Stone, Ogden Grain Exchange, sec'y-treas.; directors: Warner Arthur, S. F. Matthies, V. P. Campbell, J. J. Neville, H. M. Blackhurst, N. W. Crowther.

WISCONSIN

Frederic, Wis.—Harland Larson of Nye has been named manager of the Frederic Farmers Co-operative Exchange, succeeding Eric Lawson.

La Crosse, Wis.—The Farm Service Co. is building an elevator, office and warehouse on South Front St. Frame construction, the contractor, Cereal Engineering & Const. Co.

Mayville, Wis.—The Co-operative Oil Ass'n's feed mill and 10,000-bu. elevator has been opened under the management of Clarence Priest, who was employed in a similar mill at Lomira.—H. C. B.

Lake Mills, Wis.—Robert Currie retired July 1, after 58 years of service in flour mills. For the past 22 years, Mr. Currie had been employed at Hooper's mill, where he has been succeeded by Albert Goers.—H. C. B.

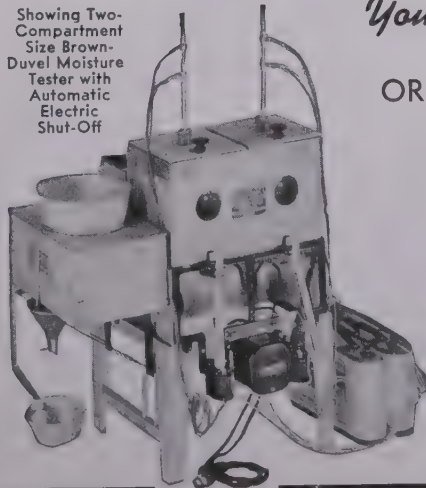
Rice Lake, Wis.—The old feed mill near the dam on Long Lake northeast of here was destroyed by fire of unknown origin the night of June 21. The mill was owned by the Northern States Power Co. and had not been operated for several years.

Superior, Wis.—With the completion of the installation of new equipment, the King Midas Co. will increase its daily production, Aug. 1, of semolina by about 2,700 bbls., according to George T. Schiller, superintendent. The plant is operating on a 24-hour basis.—H. C. B.

The Illinois Manufacturers Ass'n directors have adopted a resolution asking the political parties to declare for a government policy that will put an end to fear and uncertainty, insure reasonable safety of investments, restore public confidence, and which will be predicated upon treatment of business as a partner in serving society. Also requested is abolition of tax free, rent free, and cost free competition with private business.

PREPARE FOR THE GRAIN MOVEMENT, Check Your TESTING EQUIPMENT Now

Showing Two-Compartment Size Brown-Duvel Moisture Tester with Automatic Electric Shut-Off



ORDER **SEEDBUREAU QUALITY** APPARATUS

STEINLITE ELECTRIC MOISTURE TESTER

Guaranteed Government Standard

Brown-Duvel Moisture Testers and Complete Accessories
Tag-Heppenstall Moisture Meter
Emerson Dockage Testers
Boerner Samplers and Mixers
Dockage Sieves—Grain Triers
Scales—Sample Pans

Write for Free Catalog No. 105

SEED TRADE REPORTING BUREAU, INC.

Phone Wabash 3712
620 BROOKS BLDG. CHICAGO, ILL.

Supply Trade

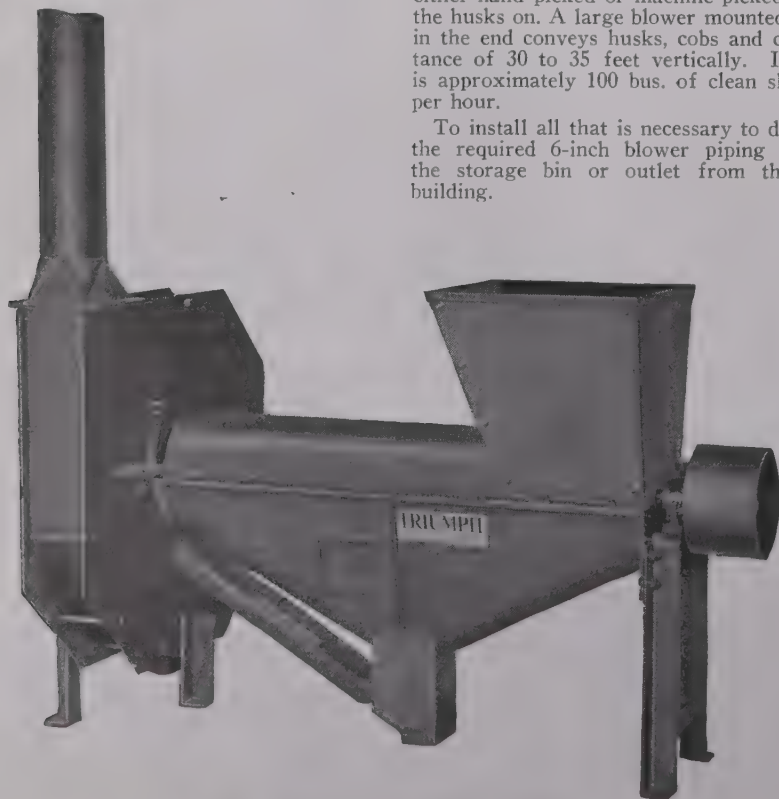
Chicago, Ill.—Fairbanks, Morse & Co., was awarded a contract for five sets of submarine propelling machinery at \$870,000 each.

Excelsior, Minn.—Mrs. Gunnar Onstad, 80, mother of H. G. Onstad, prominent grain elevator engineer, died June 7 after a long illness. Other survivors are her husband, four sons and one daughter.

Washington, D. C.—The Wage and Hour Division has placed crews of inspectors in the field to check up on compliance by sawmills. It is notorious that many sawmill operators in the southern states have not been paying the 30c an hour minimum wage. Lumber so produced can be tied up by injunction by the Division.

Bridgeport, Conn.—A strict identification system under which each of its approximately 60,000 plant employees will have to wear a badge bearing an inserted photograph of himself has been adopted by the General Electric Co. Company executives stated that the identification system had been adopted for all major apparatus works divisions of the company and is a precaution taken because of the nation's rearmament program. The plan will prohibit unauthorized persons from entering the plants.

Cincinnati, O.—Nine manufacturers of vitrified pipe and the Southern Vitrified Pipe Ass'n have been ordered by the Federal Trade Commission to discontinue fixing and establishing of differentials in price to be charged on sales to dealers as compared with sales to building contractors; (2) agreeing with their respective dealer customers as to prices to be quoted on the resale of vitrified clay sewer pipe; (3) determining what concerns shall be recognized as dealers entitled to purchase at dealers prices; (4) restricting the quantity of vitrified clay sewer pipe to be produced by the respondent manufacturers, and (5) collaborating with trade associations composed of vitrified clay sewer pipe manufacturers in other sections, but who sell in the respondents' territory, so as to effect restriction of price competition in the respondents' territory.



Corn Sheller with Attached Blower.

Unusual Scale Installations

The Macon Grain Co., Macon, Ill., and the Assumption Cooperative Grain Co., Assumption, Ill., are preparing by identical scale installations to serve their customers in the modern way. These complete outfits sold and installed by Soweigh Scale Co. consist of twenty ton scales with platform 34' x 10' and a Streeter-Amet Type B. Recorder which has been used with a high degree of success by other industries. It is expected to win complete confidence of patrons because it operates entirely automatically without manipulation of drop weights or poises. The weighmaster's hand does not touch the machine except to insert the ticket and to push the electric button which causes the machine to print the exact weight of the loaded truck. The weight printed is correct within five pounds.

This recorder operates on a principle unique in scale practice, electricity supplies all the motive force to drive the indicator and printing mechanism. The scale does the weighing only. Even in case of power failure loads can be weighed.

Sheller Blowing Cobs to Safe Distance

A regulation cob burner located and constructed as planned by the mutual fire insurance companies will dispose of cobs without much fire risk.

Since the advent of the corn picking machine some husks are delivered to the sheller with the ears; and, altho cobs have sufficient weight to flow down a cob spout to a burner the husks may clog the cleaner and stop somewhere on the way to the burner and become a real fire hazard.

Some elevator operators have tried to solve the problem by installing a scalping reel over the corn cleaner, or by enlarging the downspout from elevator cupola to cob burner.

Altho the light husks do not flow readily they can be handled by a blower, a fact of which advantage has been taken by the C. O. Bartlett & Snow Co. in designing the cob blowing corn sheller shown in the engraving herewith. This machine does a splendid job with either hand picked or machine picked corn with the husks on. A large blower mounted integrally in the end conveys husks, cobs and chaff a distance of 30 to 35 feet vertically. Its capacity is approximately 100 bus. of clean shelled corn per hour.

To install all that is necessary to do is to add the required 6-inch blower piping leading to the storage bin or outlet from the elevator building.

Receiving Books For Grain Buyers

Farmer's Deliveries. A convenient form for recording loads of grain received from farmers. Tare weight is entered immediately under gross to facilitate subtraction. Two hundred pages of linen ledger paper, ruled 20 lines to a page, thus accommodating 4,000 loads. Well bound in cloth, with keratol back and corners. Order Form 380. Weight 2¾ lbs. Price \$2.50, plus postage.

Receiving and Stock Book for keeping a record of each kind of grain received in separate columns, so buyer may easily determine total amount of any grain on hand. Size 9¼x11½, 200 pages, with a capacity for 4000 loads. Well printed on linen ledger paper, bound in cloth with keratol back and corners. Order Form 321. Weight 2¾ lbs. Price \$2.50, plus postage.

Grain Scale Book, a combined Journal and Receiving book. Each man's grain is entered on his own page. Both debits and credits are posted to the ledger. Contains 252 numbered pages and 28 page index, size 10½x15½ inches, will accommodate 10,332 loads. Printed on linen ledger, bound in extra heavy black cloth covers, with keratol back and corners. Weight 5 lbs. Order Form 23. Price \$4.00, plus postage.

Grain Receiving Register is designed for recording the receipts of farmers' grain. Loads may be entered in consecutive order, or different sections of the book may be devoted to different kinds of grain. Book contains 200 pages of linen ledger paper, size 8½x14 inches, each of which is ruled for 41 entries, giving a total capacity of 8200 wagon loads. Well printed and substantially bound in full canvas. Weight 3 lbs. Order Form 12AA. Price \$2.55, plus postage.

Duplicating Receiving Book, designed to facilitate the recording of loads received from farmers. Book contains 225 leaves, size 12x12 inches with 33 lines each, perforated down the middle; the inside half of the leaf remains in the book, and the outer half with the same ruling printed on the reverse side, folds back over the inside half with carbon between. It may also be used by line agents in making daily reports. Check bound with canvas back, nine sheets of carbon. Weight 4½ lbs. Order Form 66. Price \$2.60, plus postage.

Grain Receiving Ledger, may be used first as a Stock Book by posting the receipts daily, weekly or monthly from some other portion of this book, or from any other scale book, giving a page to the grain handled; Second, as a patrons' ledger, by giving a full or half page to each patron; Third, pages may be used to enter each load of grain received in consecutive order under their respective headings. Contains 200 numbered pages with 44 lines to page, and a 28-page index, size 8½x13¾, ruled with the usual column headings, including Debit and Credit columns. Printed on linen ledger paper and well bound in black cloth sides with keratol back and corners. Weight 2½ lbs. Order Form 43. Price \$3.00, plus postage.

Form 43XX contains 428 pages same paper and ruling as Form 43. Weight 4½ lbs. Price \$5.00, plus postage.

Printed and Supplied by

Grain & Feed Journals

Consolidated

332 South La Salle St. Chicago, Ill.

Grain Carriers

Rates on grain and grain products from Archer, Ill., to Chicago are increased by the C. & N.-W. Ry. tariff 17042-B, sup. No. 4, effective July 20.

Grain and grain products were loaded into 33,656 cars during the week ended June 22, against 46,981 cars during the like week of 1939, as reported by the Ass'n of American Railroads.

Buffalo, N. Y.—A barge owned by the Reliance Marine Corp., of Kingston, N. Y., carrying 30,500 bus. of wheat, was struck on June 28 by another barge coming in the opposite direction and sank with an estimated loss of \$50,000.

Winnipeg, Man.—The Northwest Line Elevators Ass'n has employed counsel to oppose abandonment of rail lines, before the Board of Transport Commissioners, in the interest of wheat growers who may be deprived of shipping facilities.

The Milwaukee Road will continue operation of the line between Oxford Junction and Davenport, Ia., abandonment of which was contemplated; and will take over one mile of line abandoned by the Rock Island, giving a new connection with Dixon, Ia., and affording the grain elevator there a rail outlet.

Chicago, Ill.—The complaint by the Board of Trade Transportation Department is against the charge of \$2.25 per car for material and labor of installation of grain doors in the Chicago switching district. The charge for doors at Chicago on crosstown movement of grain is unfair as there are charges of $3\frac{1}{4}$ c for a one line, $3\frac{3}{4}$ c for a 2-line switch and $4\frac{1}{2}$ c for per 100 lbs. for a 3-line switch. The charges were incorrectly stated in this column June 26. The Interstate Commerce Commission has decided that a charge of 66 cents per car should apply for the installation of grain doors in the Chicago district, the same as applies on road-haul movement; but the railroads insist they should be permitted to make a charge also for the material and have succeeded in getting the case reopened.

Winnipeg, Man.—A partial embargo on consignments of wheat has been imposed by the Canadian Pacific in a restriction to 200 cars daily loading for Fort William-Port Arthur.

The Mid-West Shippers Advisory Board forecast shows that aggregate carloadings for the area for the third quarter will be 873,000 cars. If this figure is attained (it may be exceeded) it will be the heaviest loading since the third quarter of 1931. Car loadings in other regions are expected to be about on the same ratio.

Free pick up service by six leading Chicago railroads was forbidden by the Interstate Commerce Commission in a decision June 27 in the case of live stock, holding that it was really a reduction of rates. The Commission held that the railroads could provide the truck service lawfully by making joint rates with motor carriers.

Additional Free Time on Re-inspected Grain

The demurrage rules at Chicago have been changed, effective July 8, to allow one additional day of free time on grain and soybeans where re-inspection or appeal is called and the grade is changed.

The procedure prescribed by the railroad Demurrage Bureau follows:

"It is understood that in instances where re-inspection or appeal is requested while cars are held in the railroad yards for disposition a copy of the call will be filed with the Board of Trade Joint Agency of the railroads, that agency to stamp thereon the date and hour of receipt. The Board of Trade Joint Agency will likewise arrange regularly to obtain information from the federal or state inspection department as to whether or not the grade is changed and after making proper notation on the copy of the call, forward it to the local freight agent of the railroad involved as information in connection with compiling his demurrage records."

The F.S.C.C. bought 461,000 barrels of flour June 17 for relief distribution and for shipment before Nov. 30. Corn meal and grits purchases of June 3, 13 and 17 totaled 1,227,900 barrels, also for shipment before Nov. 30. The corn will be supplied from the 500,000,000 bus. under control of the government; and the quantity is too small to affect the price.

Books Received

LIVE YEAST for Poultry, the Why of It, is an interesting booklet explaining the manufacture of yeast and the benefits of its inclusion in the feed of poultry to bring about a partial pre-digestion of the mash by fermentation. Paper, 16 pages, illustrated. Sent free to dealers on request by the Northwestern Yeast Co., Chicago, Ill.

STATE TRADE WALLS HAMPER RECOVERY.—Laws restricting trade between the states have much the same effect as tariffs in curtailing living standards and retarding recovery, according to a study published by the Public Affairs Committee. Although the Constitution prohibits states from levying tariffs against each other's goods, individual states have imposed many restrictions on trade which are as effective as duties on imports from foreign countries. Consumers are seen as the chief victims of such legislation since in every case prices are boosted or maintained at uneconomically high levels. These trade barriers also "hurt many more home producers than they help," it is pointed out, "because of the reprisals and retaliations which so often follow in the wake of such practices." "Unquestionably the primary responsibility for removing trade barriers," Professor Melder concludes "rests with the states. If they can overcome local vested interests sufficiently, they can pursue two lines of action. The first of these is the uniform law method. States have already adopted uniform laws on many subjects. There is no valid reason why uniform legislation should not be extended into the trade barrier field. . . . The second possibility is the use of 'compacts' to regulate activities which concern two or more states, or to settle problems which involve the states of a region. Such agreements must cover constitutional purposes, and are subject to the approval of Congress. . . . If the states muff their chance by refusing to act, ultimately the federal government will be forced to act in the interest of national welfare and at the cost of states' rights. A government or agency of government which is blind to public need will be replaced by some authority capable of doing its job when the matter becomes vital to the public welfare. Probably the states will learn this lesson before it is too late. If not, we can expect a further and drastic change in our federal system with increased centralization of power in Washington." State Trade Walls is the thirty-seventh of a series of factual, 10-cent pamphlets published by the Public Affairs Committee, 30 Rockefeller Plaza, New York City.

So far there has been only a small recovery in prices for beans, although grains registered substantial upturns from the low points reached. The situation abroad, with the principal importing countries now under the domination of Germany, precludes much export business unless there is peace established by fall. On the other hand supplies of old crop beans available are small.—Fred A. Record.

Omaha, Neb.—Operators of small flour mills from many points in the middle west met here May 3 and 4 and organized the Midwest Millers Ass'n. Millers from Nebraska, Iowa, South Dakota, Kansas, Colorado, Wyoming and Montana were present, and in the election held, the group chose the following to represent it officially: Donald Bridge, Norfolk, Neb., pres.; Guy Grimes, Des Moines, Ia., vice-pres.; William Vanderheiden, Humphrey, Neb., treas.; Tom Wright, Brainard, Neb., sec'y. Elected to the executive com'te were Guy Cooper, Humboldt, Neb.; E. Gaido, New Castle, Wyo.; H. J. Johnson, Holdredge, Neb.; E. I. Mead, Scottsbluff, Neb.; and E. Busing, Naponee, Neb. The Ass'n voted to meet once each year in Omaha during the latter part of April. A fall meeting will be held here for future organization purposes.

GOODRICH BROS. CO.

ELEVATOR

Winchester, Ind.

is equipped with a

HESS

Automatic, Oil Burning
Direct Heat
DRIER AND COOLER

They're Profit Makers

HESS WARMING AND VENTILATING CO.

1211 SO. WESTERN AVENUE
CHICAGO, ILLINOIS



GOODRICH BROS. CO. ELEVATOR
WINCHESTER, IND.

Field Seeds

Brandon, Man.—A. E. McKenzie has made an endowment of \$500,000 to Brandon College.

New York, N. Y.—Marshall H. Duryea has been appointed chairman of the seed committee of the Produce Exchange.

Fremont, Neb.—Earl Conrad and Lucy Y. Conrad have bought the Yager Seed Co. of J. A. Yager.

St. Peters, Ill.—Chas. Borschelt & Co. are building a plant for handling principally red-top seed, and have installed two large cleaners.

French Lick, Ind.—The Indiana Wholesale Seed Dealers Ass'n will meet here Aug. 2 and 3. Pres. C. M. Scott of New Albany invites all wholesale seed firms in adjoining states to get together and discuss buying conditions.

Washington, D. C.—On June 25 the Wage and Hour Administration granted seasonal exemption to plants cleaning and preparing perennial and common ryegrass, Hungarian vetch, hairy vetch, chewings fescue, tall fescue, Austrian winter peas, bent grass and Ladino clover seed.

West Branch, Ia.—Bluegrass strippings from the June harvest are hauled to this place from a distance of 40 miles and spread out to dry, while 10 to 15 men turn and rake them for the Ouren Seed Co., of Council Bluffs, which buys the strippings by the acre.

Albany, Ore.—Seedsmen of the Willamette Valley who conferred with the A.A.A. agreed on a contract for handling peas and hairy vetch. Under the plan, the dealers will purchase the seed from the farmers at a stipulated price, receiving 25 cents per hundred-weight for cleaning, handling, etc., and storage of 15 cents per ton after the first thirty days.

Albany, Ore.—Opening its new seed plant June 22 the Chas. H. Lilly Co. held open house to over 2,000 visitors. Luncheon was served and the High School band played all afternoon. The equipment included two large Hart-Carter machines, two multiple endless seed cleaners and two large cleaners. Fire originating in another building July 1 spread to and completely destroyed the seed plant on which the Lilly Co. had expended \$20,000 in remodeling.

Moscow, Ida.—Drought-resistant Michels grass, the seed which sold at \$1 a pound last year, will be marketed by the Northwest Seed Growers, Inc., composed of Inland Empire farmers who produce the sensational new pasture grass for seed. All seed will be pooled. Professor C. A. Michels of the University of Idaho, who crossed wild rye and winter wheat to develop the hardy plant that bears his name, said the grass will grow on land too dry for wheat, that livestock like it, and that yields run to 50 bushels per acre.—F. K. H.

Sacramento, Cal.—The Attorney-General is expected to review his ruling that the word "seed" being included in the definition of a "plant" and a plant being defined as nursery stock, it was evident that any person shipping or selling any "seed" was subject to the license covering "nursery stock." This license is ten dollars a year with two dollars for each branch and 50c for each acre excepting the first with a maximum acreage fee of fifteen dollars. This would cover field, flower and vegetable seeds and would affect every feed and grain store in the state. Such license is properly not applicable outside of what is distinctly the nursery business.

Sudan Grass Recommended

Sudan grass planted late in May or early in June, will be knee high by July 4th, and will furnish an unbelievable amount of feed during the dry period. The Wisconsin Experiment Station recommends broadcasting or drilling at the rate of 30 to 35 pounds of seed per acre, covered about 1 inch deep. It will carry from 2 to 3 head of horses—mares and foals, and yearlings—per acre for 30 to 60 days and stimulates milk flow even above sweet clover.

C. S. Howard, owner of Sea Biscuit, stated May 10, in a personal talk with Secretary Dinsmore of the Horse and Mule Ass'n of America, that he had used Sudan grass pasture for mares and foals in California and noticed the immediate increase in milk flow in the mares, and enhanced growth of their foals, very shortly after they had been turned into such pasture.

Grain Standards Research and Crop Improvement

By ROBERT H. BLACK, in charge of grain standards research, U. S. D. A., at Field Day meeting of Kansas Wheat Improvement Assn., Riley, Kan.

The introduction of new varieties of wheat sometimes causes difficulties of classification in the actual inspection of the wheat. Grain inspectors are required to grade many varieties of wheat and are able to classify them according to the general appearance of the kernels in each lot.

Kawvale wheat is a soft red winter wheat in shape, kernel characteristics, and general appearance, and yet in some instances it is really a semi-hard wheat in texture. Some of the hard red winter varieties grown under certain weather conditions are also semi-hard in texture. Tenmarq wheat is a hard red winter wheat and usually is graded as such altho it has some of the kernel characteristics of the hard red spring wheats. This is natural because of the fact that one of its parents was Marquis, a well-known spring wheat. The introduction of such varieties into commerce presents inspection problems which can be solved only by grain standards research.

By co-operating with the crop improvement we are able to learn of the trends in these changes in varieties, and we attempt in so far as possible to set up the necessary standards and inspection information and instructions which will permit the proper grading of these new varieties when they appear on the market.

Within the last 10 years a demand arose for a quality of barley which was suitable for malting purposes. Our barley standards which were in effect at that time did not differentiate between barley which was suited for feed only and that which was suitable for malting. At the time that we established standards for malting barley in 1934, much of the barley produced was of mixed varieties and the majority of it could not qualify under our malting standards. With the assistance of three of the crop improvement associations this situation has been changed until today the quality of the barley which is actually graded as malting barley has been improved and a larger percentage of the barley produced within certain areas is well suited for malting purposes.

In the research work which we conduct in connection with off-grade, degraded, and undesirable qualities of grain, we learn the shipping points from which such grain originates. This information is furnished either in tabular form or in map form to the crop improvement

associations, to the extension agronomists of the various States, and to various county agents. Such information has been found useful by these men in assisting them to decrease the amount of mixed wheats, poor quality wheats, smutty wheat, and other undesirable qualities produced in their areas.

Germination of Sericea Seed

HARD SEED—Sericea seed as harvested is in the hull. While the hull is but a delicate membrane that readily absorbs water, the seed coat is hard and in most of the seeds is impermeable to water. This results in a low percentage of germination.

Many germination tests have been made both in the seed laboratory of the Department and in soil or sand in the greenhouse. The results have varied widely. In some cases the germination of the unhulled seed has been as low as 2.5 per cent, with 88 to 91.5 per cent remaining hard. In others up to 72 per cent of the unhulled seed have germinated with 19.5 per cent remaining hard. In most cases, the range of germination of unscarified seed has been between 10 and 20 per cent.

Selection work was carried out by the Bureau of Plant Industry over several years with the hope that the descendants of certain individual plants that in 1928 produced a high percentage of quickly germinable unhulled seed might inherit this quality. No progress was made, however, as descendants of plants producing in one year a high percentage of quickly germinable unhulled seed were, in later years, no better than the average. No explanation can be offered today for this variation in results. Possibly climatic conditions when the seed is ripening may have an influence, but no evidence has been found to sustain this supposition.

Sericea produces some seed larger than others. It is possible that one kind is produced by the flowers with petals and another by the apetalous flowers, but this point has not been studied. A test of the germination of unhulled seed produced by individual plants in the same year showed that the large unhulled seeds germinated more freely than the small ones, the average percentage of germination of seed from the five plants being 62 for the large and 22 for the small. If this should prove to be the rule, a variation in the proportion of large and small seed may explain variations in percentage of germination. This difference in germination may explain why the use of unhulled seed is sometimes attended with success while at other times only a poor stand results.

TREATMENT OF HARD SEED—Hard seed may be treated by various methods all designed to break or soften the impermeable outer coat so that water may enter. Such methods include treatment with sulfuric acid, hot water, dry heat, and mechanical abrasion or scarifying.

All these are effective and their usefulness in practice depends on the economy and convenience of application. The action of winter cold should also be effective, but no data have been secured on this point. In fact, there are some indications that such action is not very effective. Repeated sowing of unhulled seed at Arlington Experiment Farm during winter has never resulted in more than a scattered stand.

Hot water has been shown to be effective. In one series of experiments by the Bureau of Plant Industry boiling unhulled seed for 15 seconds improved the germination from 6.5 per cent to 94 per cent. In another series of tests it was shown that best results were secured by keeping hulled but unscarified seed for 30 to 45 minutes in water at 70 deg. C. (158 deg. F.) or for 1 minute at 90 deg. C. (194 deg. F.). At higher temperatures for 3 minutes the seed was killed. Dry heat was also effective. Seed kept in an oven at 90 deg. C. for one-half hour germinated 94 per cent with 4 per cent remaining hard. In a trial with sulfuric acid it was found that immersion of hand-hulled seed in the

acid for 30 to 60 minutes resulted in the germination of 98 to 100 per cent of the seed. Immersion for 10 minutes was not so effective, 60 per cent of the seed germinating and 35 per cent remaining hard.

While these methods have been successful in experimental work, their practical application on a large scale is obviously difficult or impossible. Attention was, therefore, turned to mechanical abrasion and it has been shown that, properly carried out, scarifying is not only effective but also practical. By scarifications the germination may be raised to between 75 and 85 per cent, depending on the efficiency of the operation. Excessive scarification may result in many seeds being internally injured so that they produce worthless, broken sprouts. Most commercial scarification is done by standard machines made for this purpose.—Circ. 534, U.S.D.A.

Bindweed Spreading

Field bindweed first made its appearance in the west. Kansas was one of the first states to learn its dangers. In recent years the pest has been introduced into the middle west. At first, only a few small patches were found, most of them were confined to gardens and around buildings.

Field bindweed is a morning glory-like plant having arrow shaped leaves and white or pinkish white blossoms. The blossoms are bell-shaped, usually about one inch in diameter. The plant has a vining habit of growth, climbing on nearby objects. If the plants are growing alone, they form a heavy mat of vegetation, covering the ground. It is a deep rooted perennial and spreads by both seeds and root parts.

Hybrids Need Rich Soil

A total of 331 hybrids and 29 open-pollinated varieties were included on the ten Illinois corn-performance test fields in 1939. This was the largest number of entries on record. On the central and north-central fields the number of entries was increased from 60 to 73 or 75, owing to demand on the part of producers for the opportunity to enter their crosses. The other fields included 61 entries or less. Five open-pollinated varieties were used as a check on each field. Forty-eight companies and individuals entered hybrid seed and 27 companies and individuals furnished the open-pollinated varieties.

The 1939 results as reported in Bulletin 463 of the Ill. Agr. Exp. Sta. were not greatly different from those in 1937 and 1938, equally high yields being produced in all three years. Hybrids demonstrated their capacity for high yields, especially on the highly fertile field at Urbana. The average yield of the five best hybrids on the soil of high fertility was 19.7 bus. better than Station Yellow Dent. At Sibley on soil of low fertility the yield of the five best hybrids was 15.3 bus. above the yield of the open-pollinated varieties. This exceptionally wide difference at Sibley on the low-fertility level was probably due in part to favorable weather causing an especially high yield and in part to the wider adaptability that is being developed in hybrids. Adapted hybrids have much greater resistance to unfavorable conditions than most of the open-pollinated varieties.

The 1939 tests emphasize again the great importance of maintaining the soil in a high state of fertility if advantage is to be taken of the high-yielding capacity of the better hybrids. On the highly fertile soil at Urbana, U. S. Hybrid 5 demonstrated, by standing at the top of the list, that it has a great capacity for utilizing plant food. This hybrid has ranked at the top or near the top for four consecutive years. On the less fertile soil, however, it has never had a high ranking.

More than five and a half million acres of Illinois corn land were planted with hybrid seed in 1939, or 69 per cent of the total corn acreage of the state. In central and northern Illinois the percentage of hybrid corn was even higher.

A favorable season, combined with the exten-

sive use of hybrid seed corn adapted to the locality and to the soil where planted, resulted in an average yield over the entire state of 52 bus. an acre, the highest ever reached in Illinois.

A. S. T. A. Convention at Chicago

PRES. ROY A. EDWARDS of Kansas City called the 58th annual meeting of the American Seed Trade Ass'n to order at 11 a.m., June 24, in the Palmer House, Chicago. In his address he said:

Pres. Edwards' Address

Federal Seed Act.—The year 1940 marked an historic mile-post in our industry by the enactment of the new Federal Seed Act, which went into effect on Feb. 5 this year. The provisions of the Act vitally affect all phases of the seed business. Its great benefits to the agriculture of the nation carry with it equal responsibilities on the part of our industry.

The law itself is only as good as its enforcement, and it is up to the industry to cooperate with the government in influencing sentiment so that Congress may appropriate sufficient funds to enforce properly the regulations. We are confident that the entire membership of this association is back of the enforcement of the law, and will lend their fullest cooperation to the policing of the unscrupulous dealer and itinerant trucker.

State Seed Councils.—As an immediate constructive measure, I would urge the state seed associations and seed councils, which ever organizations are in position to function, to meet with the law enforcement officials of the several states and prepare the groundwork for the new uniform state seed bill. Thus the meeting of their legislatures may be well anticipated, and the desired uniformity in this legislation can be obtained.

Dues.—There are few similar associations representing such a large volume of business, covering so many complex activities, which attempt to accomplish commensurate results on the nominal dues collected from our membership. There will be presented later to you in our meetings a request for increased income, which I feel you will readily approve.

Junior Seedsmen.—The Junior Seedsmen of our association is a group that should be encouraged in every way possible. These Junior seedsmen are the ones who in years to come must shoulder the responsibility of our industry.

Official Seed Laboratory.—For many years our industry has felt the dire need of a recognized official laboratory for verification and referee testing. The need of such a laboratory is the more pronounced under the strict accountability of the industry with relation to the new Federal Seed Act; and also because of the lack of facilities, both governmental and commercial, necessitated by the large volume of testing under the Federal Seed Law.

A sponsored laboratory might well be one of the commercial laboratories which are already equipped and staffed. By lending our official approval and supervision to such a laboratory, it would be automatically self-supporting. On the other hand, if a laboratory were established and managed by the association, it could be financed in its inception through temporary financial support from various members of the industry.

SECY C. E. KENDEL, Cleveland, O., reported 310 active members.

J. GEORGE MANN, Minneapolis, gave an account of the vast amount of work done the past year on transportation matters.

WM. P. WOOD, JR., Richmond, Va., summarized the activities of the Junior Seedsmen Group.

DR. H. E. BARNARD, director of research for the National Farm Chemurgic Council, said: "The National Farm Chemurgic Council looks to the American Seed Trade Association to promote, because of its special interest, the expansion of many chemurgic activities. Our role is the development of industrial uses for farm crops, but, before this development, the crops must be grown and that requires the planting of seed. Every expansion of the seed trade is, therefore, of fundamental importance to the National Farm Chemurgic Council. Your association has already contributed much to the progress of our work."



Ed. F. Mangelsdorf, St. Louis, Mo., President-Elect.

NEW MEMBERS elected are: C. A. Beebe & Son, Forreston, Ill.; Eastern States Co-operative Milling Corporation, Buffalo, N. Y.; Frutchey Bean Co., Saginaw, Mich.; Balfour, Guthrie & Co., Portland, Ore.; Ruhmann Grain & Seed Co., Waco, Tex.; Charles R. Moore, Cincinnati, O.; Mitchellhill Seed Co., St. Joseph, Mo.; W. B. Johnston Grain Co., Enid, Okla.; Gooding Seed Co., Gooding, Idaho; Kollman-Warner Co., Sioux City, Ia.; Hartz-Thorell Supply Co., Stuttgart, Ark.; Geo. J. Ball, Inc., West Chicago, Ill.; Sphar & Gay Seed Co., Winchester, Ky.; Ging & Co., Farina, Ill.; Standard Seed Co., Madison, Wis.; C. D. Potter, Chicago, Ill.; Northern Seed Co., Sheridan, Wyo.; Northern Farmers Co-operative Exchange, Williams, Minn., and McCabe Bros. Grain Co., Ltd., Winnipeg, Man.

Resolutions were adopted thanking those who had contributed toward making the convention so successful.

OFFICERS elected for the ensuing year are: Pres., Ed. F. Mangelsdorf, St. Louis, Mo.; First Vice-Pres., H. F. Woodruff, Milford, Conn.;

Northern Grown
SEED CORN and SEED OATS
Assure Better Results
Write for catalog and prices on O & M
dependable uniformly excellent seeds.
The O & M SEED Co., GREEN SPRINGS, OHIO

CRABBS REYNOLDS TAYLOR CO.
CRAWFORDSVILLE, IND.

GRAIN

Clover and Timothy Seeds

Get in Touch With Us

ED. F. MANGELSDORF & BRO.

Buyers and sellers of
Sweet Clover, Alfalfa, Lespedeza, Clovers, Timothy, Grasses, Fodder, Seeds, Sudan Grass, Soy Beans, Cow Peas
St. Louis, Missouri

Second Vice-Pres., A. J. Biggio, Dallas, Tex.; Sec'y-Treas., C. E. Kendel, Cleveland, O.; Assistant Sec'y, James H. Burdett, Chicago, Ill.

EXECUTIVE COM'ITE: O. J. Sawin, Chicago, Ill.; Paul Williams, Marysville, O.

MEMBERSHIP COM'ITE: T. Maurice Scott, St. Louis, Mo.; Chas. P. Morse, San Francisco, Cal.; Wm. P. Wood, Jr., Richmond, Va.; LeRoy Kling, Cedar Rapids, Ia.; R. M. Bowen, Winona, N. Y.

Southern Seedsmen Meet

Over 200 made a record-breaking attendance at the annual meeting June 19, 20 and 21 of the Southern Seedsmen Ass'n in the Jefferson Davis Hotel at Montgomery, Ala.

R. E. LAMBERT, Jr., of Darlington, Ala., read his address as president, and recommended:

1. That the Special Legislative Com'ite be continued and that the incoming president be authorized to use funds from the treasury to carry on this work.

2. That we provide \$250.00 in the budget for the support of the All-American Selections Com'ite, as in the past, and that consideration be given to increasing this sum, due to the war in Europe cutting off some of the entry fees which the com'ite usually receives.

3. That we establish a strong Educational Com'ite with two primary objectives appointed.

4. That a special com'ite study constitution and by-laws and make revisions.

FRANK S. LOVE, sec'y-treas., Jacksonville, Fla., reported the organization in good financial condition. Members as of Jan. 1, are voting, 93; associates, 121; honorary, four; state association, five; two resignations, two associate members; total membership, 221.

STUART C. SIMPSON, Monticello, Fla., recited the progress made by state ass'ns of seedsmen, and called on the following state representatives: J. S. Morgan of Alabama; Jacob Hartz of Arkansas; George Hays of Kentucky; J. H. Cole of Louisiana; Noble Pace of Mississippi; Greyson Quarles of North Carolina; Frank Keller of Oklahoma; Ed Hannah of South Carolina; H. G. Hastings of Georgia; Ed Hicks of Tennessee; A. E. Ruhmann of Texas; H. R. Bingham of Florida, and Wm. Wood, Jr., of Virginia.

DR. GLENN W. BURTON, Associate Geneticist, U. S. Experiment Station, Tifton, Ga., gave an address on "Grass Varieties; Why Not?" He pointed out the necessity of developing the grass varieties if the farmers of the South are to have diversified farming, for without good pasture, livestock cannot be raised and fed.

W. RAY HASTINGS acted as toastmaster at the banquet Wednesday evening in the Whiteley Hotel where over 325 enjoyed a steak dinner.

NEW MEMBERS voted in are: Green Brothers, Nashville, Tenn.; H. L. Cofer Seed

Co., Athens, Ga.; N. T. Wax, Amory, Miss.; Epting Distributing Co., Leesville, S. C.; Farmers Seed & Supply Co., Vicksburg, Miss.; Ibsen Seed Co., Mobile, Ala.; Fain Seed Co., Meridian, Miss.; R. P. Segall Co., Marshville, N. C.; Cross Seed Co., Wilmington, N. C.; Chas. E. Heckle, Memphis, Tenn.; E. A. Martin Seed Co., Jacksonville, Fla.; A. N. Levine, Chattanooga, Tenn.; Poultry Products Seed Co., Montgomery, Ala.; C. B. Ragland Co., Nashville, Tenn.; Sam Houston Brokerage Co., Birmingham, Ala.; Consumers Feed & Seed, Augusta, Ga.

OFFICERS elected are: Stuart C. Simpson, Monticello, Florida, pres.; A. E. Ruhmann, Waco, Tex., first vice-pres.; Jacob Hartz, Stuttgart, Ark., second vice-pres.; Frank S. Love, Jacksonville, Fla., sec'y-treas., and A. W. Tibbitts, Chicago, assistant sec'y.

Illinois Seedsmen Meet at Urbana

The work of the University Farm at Urbana, Ill., gave the visiting seedsmen of Illinois an opportunity to learn the great progress that is being made in breeding field and grass seeds. The visit to the Farm formed a most important part of their meeting June 21.

J. J. AUGUSTUS, attorney, of Chicago, expounded the application of the sales tax to seeds.

E. A. HOLLOWELL, Buro of Plant Industry, Washington, D. C., told the objectives of the red clover and sweet clover breeding programs.

DR. CHAS. F. HOTTES spoke on the text "The Seed—The Start of a New Generation" in an interesting way.

Meeting of Farm Seed Group

The Farm Seed Group of the American Seed Trade Ass'n held its annual meeting June 25 in the Palmer House, Chicago, and listened to com'ite reports by Harold Withey on dockage rules, M. C. Zellmer on statistics, A. L. Bibbins on weed control and Richard Burns on arbitration.

Chairman Lloyd M. Brown, Sec'y Carl F. Roth, and Treas. A. H. Flanigan presented their annual reports.

JOHN F. MCGOWAN, a Chicago banker, spoke interestingly on the need of a hedging market for seed merchants.

Addresses were delivered by Jos. E. Barnes, botanist of the Illinois state seed laboratory, and R. H. Porter, well known to field seed handlers as head of the seed laboratory of the State College of Agriculture, Ames, Ia.

Officers elected for the ensuing year are Lawrence Teweles, chairman; E. L. Townsend, vice-chairman; Stanley Folsom, sec'y, and Homer Flanigan, treas.

Retiring Chairman Brown was presented with a brief case and a suit case as tokens of esteem and appreciation of his work for the organization.

Taxing the consumer will never broaden the farmer's market, nor increase the price of his product, and that is true no matter whether the tax is a payroll tax on the wage earner, or a spite tax on the rich. What the farmer needs is free economic process, not processing taxes.

Permanent termite control is proper construction, but for the present the problem of control of termites in buildings already constructed is paramount. Termites must have their colony, which is with rare exception in the soil. They gain entrance to wood either because wood is in contact with the soil or because they find a place to build tunnels from the soil nest to the woodwork above. In other words the control of termites is first of all based on disconnecting in one way or another the soil contact. This may mean reconstruction or a chemical treatment or both which will prevent the worker termites from getting to the woodwork.

Grain Shipping Books

Record of Cars Shipped facilitates keeping a complete record of cars of grain shipped from any station, or to any firm. It has column headings for Date Sold, Date Shipped, Car Number, Initials, To Whom Sold, Destination, Grain, Grade Sold. Their Inspection, Discount, Amount Freight, Our Weight Bushels, Destination Bushels, Over, Short, Price, Amount Freight, Other Charges, Remarks. Book contains 80 double pages of ledger paper, size 9½ x12 inches, with spaces for recording 2,320 carloads. Well bound in heavy black pebble cloth with red keratol back and corners. Shipping weight, 2½ lbs. Order Form 385. Price \$2.50, plus postage.

Sales, Shipments and Returns. Is designed to save time and prevent errors. The pages are used double; left hand pages are ruled for information regarding "Sales" and "Shipments"; right hand page for "Returns." Column headings provide spaces for complete records of each transaction on one line. Book contains 80 double pages of ledger paper, size 10¼x16 inches, with 8-page index. Spaces for recording 2,200 carloads. Bound in heavy gray canvas with keratol corners. Weight, 3¾ lbs. Order Form 14AA. Price \$3.35, plus postage.

Grain Shipping Ledger for keeping a complete record of 4,000 carloads. Facing pages are given to each firm to whom you ship and account is indexed. Book contains 80 double pages of ledger paper with 16-page index, size 10½x15¾ inches, well bound with black cloth covers and keratol back and corners. Weight, 4 lbs. Order Form 24. Price, \$3.50, plus postage.

Shippers Record Book is designed to save labor in handling grain shipping accounts and provides for a complete record of each car shipped. Its 80 double pages of ledger paper, size 9½ x12 inches, provide spaces for 2,320 carloads. Wide columns provide for the complete record of all important facts of each shipment. Bound in heavy black cloth with keratol back and corners. Shipping weight, 2½ lbs. Order Form 20. Price \$2.50, plus postage.

Shipping Notices duplicating, 50 originals of bond paper, 50 duplicates, press board cover, 5½x8½ inches, weight 8 ozs.; 2 sheets of carbon. Price 70 cts. plus postage.

Shippers' Certificate of Weight duplicating, 75 originals of bond paper, 75 duplicates. Press board hinged back covers, three sheets of carbon, 4½x9¾ inches, weight 11 ozs. Price 95 cts., plus postage.

Railroad Claim Blanks duplicating, three different books, five forms, 8½x11 in., \$2 each book, plus postage.

Grain & Feed Journals

CONSOLIDATED

332 South La Salle St., Chicago, Ill.

Seed Movement in June

Receipts and shipments of seeds at the various markets during June, compared with June, 1939, in bushels except where otherwise indicated, were:

	Receipts 1940	1939	Shipments 1940	1939
FLAXSEED				
Chicago	80,000	25,000	26,000	...
Duluth	52,607	98,874	...	40,975
Minneapolis	161,000	73,200	123,000	20,400
New York	220,000	...	...	...
Superior	48,217	104,493	...	44,050
KAFIR AND MILO				
Hutchinson	6,500	24,700	...	...
Kansas City	32,200	98,000	42,000	85,200
Wichita .....	...	3,900	...	...
SORGHUMS				
Ft. Worth	26,600	68,600	60,200	96,600
CLOVER				
Chicago, lbs.	40,000	62,000	116,000	30,000
Milwaukee, lbs. ..	40,150	...	...	...
New York, lbs. ....	...	...	1,132	56
TIMOTHY				
Chicago, lbs.	126,000	134,000	89,000	47,000

Feedstuffs

Chicago, Ill.—The Federal Trade Commission gave a hearing here July 1 on charges of misrepresentation of a dehydrated kelp product by Philip R. Park, Inc., of San Pedro, Cal.

Savannah Beach, Ga.—The Cotton Seed Crushers Ass'n of Georgia at its recent annual meeting elected Elkin G. Taylor, Moultrie, pres.; Uhland F. Steward, Savannah, vice pres., and W. M. Hutchinson, sec'y-treas.

Brazilian shipments of cottonseed meal and cake have been diverted from Western Europe to New York, Boston, Baltimore and Philadelphia, which ports received over 50,000 bags in one week. At New York the cake is hard to dispose of, as the demand is for meal.

The Food and Drug Administration was transferred to the Federal Security Agency June 30, after having been a part of the Department of Agriculture since 1907. The work will continue as before with no change in personnel, except that the chief will be known as Commissioner of Food and Drugs (Commissioner, not Commissar).

Washington, D. C.—Hog production is now declining, having reached the peak of the production cycle in 1939. The 1940 pig crop will be materially smaller than that of 1939, but will be larger than for any other year since 1933. The spring pig crop of 1940 is estimated as 8 per cent smaller than that of 1939. The number of sows to farrow in the fall season of 1940 is indicated as 12 per cent smaller. The total number of sows to farrow in 1940—spring and fall—is indicated as about 8 per cent smaller and, with litters averaging somewhat smaller this year, the total pig crop will probably be down about 10 per cent.—U.S.D.A.

Atlanta, Ga.—At a meeting at the Piedmont Hotel June 28 it was decided to hold a feed nutrition school Oct. 10 to 12 at the convention of the feed manufacturers at Athens, Ga. Among those at the meeting were H. L. McGeorge, Memphis, Tenn., pres. of the Southern Mixed Feed Manufacturers Ass'n; R. E. Barinowski, Augusta, Ga., pres. of the Georgia Feed Manufacturers Ass'n; T. A. Pennington, Dean Paul Chapman, of the Georgia College of Agriculture, Athens, and J. C. Bell, of the poultry department, University of Georgia, Athens.

American Lecithin Co., Elmhurst, N. Y., its officers, and a group of four American, one German and one Danish corporations, are

charged in a complaint issued by the Federal Trade Commission with organizing a combination and conspiracy to monopolize trade and restrain competition in the purchase and sale in interstate and foreign commerce of lecithin, a by-product of soybean oil manufacture.

Feed Dealers at Binghamton

An attendance the largest for many years greeted the officers of the Eastern Federation of Feed Merchants when the 2-day convention began June 28 in the Arlington Hotel at Binghamton, N. Y.

AUSTIN W. CARPENTER, vice pres., of Sherburne, N. Y., conducted the meeting after the call to order by Pres. Albert J. Thompson of Wycombe, Pa.

LOUIS E. THOMPSON, sec'y, of Glen Ridge, N. J., reported that the Ass'n was in better financial condition than a year ago. He reported a membership of 177, a net gain of 10 during the past year. He outlined some of the activities of his office, speaking particularly of the co-operation existing between this and other feed trade associations.

DR. ALEXANDER SCHWARCMAN, research director of Spencer Kellogg & Sons, Buffalo, N. Y., spoke on the Wonders of Modern Science, describing the progress made thru the ages.

C. W. SIEVERT, Chicago, Ill., said that 450,000,000 lbs. of dry skim milk is made annually, as well as 60,000,000 lbs. of dried buttermilk, most of it going into feeds.

HENRY B. BULL, attorney, of Middletown, N. Y., spoke on Amendments to Lien Laws; William F. Berghold, editor of the Rural New Yorker, talked on Garnishment of Milk Checks; B. D. Simmons of Sussex, N. J., on Extent of Retail Feed Delivery; Fred A. Hespenheide of York, Pa., on Supply Business, and President Thompson on Cost Accounting for Retail Feed Stores.

DR. ALLEN A. STOCKDALE of the National Ass'n of Manufacturers, urged Free Enterprise in a Free America at the evening banquet, where the toastmaster was John V. Nolan of Malvern, Pa., pres. of the Southeastern Pennsylvania Feed Merchants Ass'n.

R. C. BORDEN outlined the methods to be pursued in selling a product.

The resolutions adopted recommended legislation to permit the state of New York to charge tolls for the use of the barge canal;

that farmers of a given community who are receiving government aid under the heading of soil conservation be permitted to purchase supplies thru their regular channels without government interference; that independent feed dealers be granted the same tax rate and same privileges now enjoyed by co-operatives; that agents of government departments be instructed to exercise an impartiality toward all classes of dealers.

Officers chosen for the ensuing year are: Pres., A. J. Thompson, Wycombe, Pa., re-elected; 1st vice pres., A. W. Carpenter, Sherburne, N. Y., re-elected; 2d vice pres., Jas. H. Gray, Springville, N. Y.; sec'y-treas., Louis E. Thompson, Glen Ridge, N. J., re-elected.

Directors: Louis S. Camp, Walton, N. Y.; William R. Conklin, Chester, N. Y.; Harry E. Edsall, Sussex, N. J.; R. C. Haas, Evans Mills, N. Y.; John V. Nolan, Malvern, Pa.; Fred M. McIntyre, Potsdam, N. Y.; B. D. Simmons, Sussex, N. J.

Ration Low in Fat Is Profitable in Dairy

From the results of recent trials, it seems that there can be considerable margin in the fat percentage in grain mixtures fed to dairy cows, according to C. F. Monroe and W. E. Krauss, associates in the Dairy Department at the Ohio Agricultural Experiment Station.

In these trials, grain mixtures containing 2.7 per cent, 3.5 per cent, and 4.7 per cent of fat were compared. These percentages of fat were obtained by using 44 per cent (brown extracted) soybean oil meal, 41 per cent (expeller) soybean oil meal, or ground soybeans. In the low-fat mixture, browned extracted meal, which is low in fat, was used exclusively, and in the medium-fat mixture, 41 per cent (expeller) soybean oil meal only was used. In the high-fat mixture, both ground soybeans and 41 per cent (expeller) meal were used together with a very small amount of linseed oil meal.

Except for the fat percentages, the three mixtures were as similar as they could be made with natural feeds. The other components of the mixtures were corn-and-cob meal, oats, wheat bran, molasses, beet pulp, minerals, and salt.

The roughage generally consisted of practically all the first- or second-cutting alfalfa hay the cows would eat and approximately 30 pounds of corn silage per day. During a part of one trial, hay silage was fed in place of corn silage. All the cows received the same roughage feeding.

Results of the comparisons are based on two trials of 110 days each in which 70 purebred Holstein cows were fed the different grain mixtures. The average production per cow on the 2.7 per cent fat grain mixture was 3.5 pounds of milk per month lower than that of cows on the 4.7 per cent fat mixture. Pro-

Hay Movement in June

Receipts and shipments of hay at the various markets during June, compared with June, 1939, in tons, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Boston	528	484	...	...
Chicago	1,716	1,378	859	56
Ft. Worth	2	0	2	0
Kansas City	396	528	60	72

Feedstuffs Movement in June

Receipts and shipments of millfeeds at the various markets during June, compared with June, 1939, in tons, were:

	Receipts		Shipments	
	1940	1939	1940	1939
Baltimore	3,630	5,568	...	...
Boston	1,500	613	...	20
Chicago	9,637	14,421	29,569	37,850
Kansas City	3,950	4,575	17,925	25,375
Milwaukee	80	230	9,120	6,580
Minneapolis .....	...	...	26,925	29,550
New York .....	...	50	...	...
Peoria	10,040	10,740	13,340	10,820

"RANDOLPH"

OIL-ELECTRIC GRAIN DRIER

The Drier Without a Boiler

ASK THE MAN WHO HAS ONE

THAT'S ALL

MANUFACTURED BY

O. W. RANDOLPH COMPANY

3917-21 Imlay St., TOLEDO, O., U. S. A.

duction on the medium-fat mixture was 2 pounds lower than that on the high-fat mixture. These differences were too small to be regarded as of practical importance. From an economic standpoint, it cost less to produce milk and butterfat on the low-fat grain mixture than on either of the other two because this feed was cheaper.

Mineral Nutrition

By H. S. WILGUS, JR., Colorado Exp. Sta., before Texas Feed Mfrs. Ass'n.

ANIMAL REQUIREMENTS CHANGED.—Man has intensified the requirements of his domesticated animals for nutritives by breeding for intensive production of meat, milk, and eggs. This has been further aggravated by modern methods of management and feeding. Wild birds may lay a dozen or two of eggs in a year, but man has bred, fed, and managed the fowl to the point where flock averages of 200 eggs per bird per year are the usual expectation. In calcium output alone this has been an increase from about 20 grams to about 400 grams!

Domesticated animals have been placed under unnatural environmental conditions. Range in certain areas has been restricted to barnyards. Sanitary pig pens with concrete floors are common. Individual laying cages and battery brooders are here to stay. The chicken now may live its lifetime without seeing Old Sol or touching Mother Earth. Such animals depend entirely on rations given them by man.

Man has bred his animals for increased production, failing to recognize that nutritional requirements are probably hereditary. Recent experimental evidence with poultry strongly suggests that differences exist among individuals, strains, and breeds in requirements for manganese, vitamin B₁ and riboflavin.

SUPPLEMENTATION ESSENTIAL.—As a result of these changes in plant composition and intensification of the requirements of animals—changes which are still going on as civilization continues to become more complex—it has been necessary to supplement rations. Insofar as minerals are concerned, it has been more economical to remedy the deficiencies of feeds directly in the ration rather than by "feeding" the soil, except where crop yield has been affected.

Today we recognize that calcium, phosphorus, magnesium, sodium, potassium, chlorine, iodine, sulphur, copper, iron, cobalt, manganese, zinc, and possibly nickel and arsenic are essential elements to animals. Of these elements, deficiencies of calcium and phosphorus are relatively common, owing largely to the high requirement of animals for these elements in the skeleton. A deficiency of sodium and possibly chlorine is uncommon since most farmers are feeding salt to their animals. Iodine is a limiting factor in the more deficient areas of the goiter-belt, namely, the Northwest, the northern Great Plains, and the Great Lakes Basin. Manganese deficiency is quite common in poultry, particularly under intensive methods of production. Iron, copper, cobalt, and possibly magnesium deficiencies are largely localized and relatively rare. Deficiencies in the other minerals are as yet essentially laboratory phenomena obtained only under carefully controlled conditions.

RECOGNIZING COMMON MINERAL DEFICIENCIES.—To be useful, deficiency symptoms must be specific. Growth, reproduction, and apparently health are not diagnostic. A few specific symptoms of common deficiencies follow.

Lack of salt causes no marked deficiency symptoms, but efficiency of feed utilization is lowered and the animals crave salt. As mentioned, the need for salt is almost universally recognized and met.

Calcium deficiency results in lowered inorganic calcium in blood serum of animals. Bones are hard but thin and brittle. Egg shells become thinner. Such a deficiency is common in ruminants, especially cattle, on non-leguminous hays and grain, and in hens which need so much of

this element for egg shells. Developing pullets need calcium supplements, owing to their high consumption of grain. Pigs are prone to calcium deficiency. In pigs this deficiency causes posterior paralysis, a fracture of the vertebrae, unless tankage is used for a protein supplement or unless limestone or bonemeal is used in proper amounts.

Lack of phosphorus is indicated by low inorganic phosphate content of blood serum and by bone-chewing, soil eating, or abnormal appetite (pica), especially in cattle. It is common in animals on hay or grass, particularly when the soil is low in phosphorus and when the ration is not supplemented with protein carriers. Protein supplements are usually rich in phosphorus. However, poultry or hog rations utilizing large quantities of vegetable protein concentrates may require supplementation with some bonemeal. Sheep apparently have about the same requirements for calcium and phosphorus as cattle.

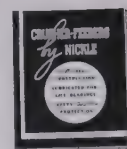
Iodine deficiency is commonly recognized by goiter in farm animals. Hairless pigs are also caused by such a lack. Where these symptoms are found, iodized salt is commonly used or larger amounts are supplied by the use of potassium iodide.

Supplementation of rations with additional minerals should be done only when deficiencies are found in feeds by comparison with the known requirements of animals, or when deficiency symptoms in farm animals are observed in definite areas.

Analysis of feedstuffs may not show their true nutritive value because certain minerals, even though present in feedstuffs, may not be assimilated by the digestive system of animals. For example, it is well known that iron varies in availability in different feeds and that phytin phosphorus in plants is not entirely digestible by certain species.

(To be continued)

The U.S.D.A. recently purchased 1000 tons of mill run bran for grasshopper bait for shipment to Montana and North Dakota.



EAR CORN CRUSHERS

Bulletin 920 deals with the problem of feeding hammer and attrition mills. Send for your copy today—it's free.

● NICKLE ENGINEERING SAGINAW MICHIGAN

CHECK
YOUR
FORMULAS
with
Laboratory
Analyses

Protein, Fat, and Fibre
—Feed or Grain—
Analyzed at
Reasonable Rates
Runyon Testing Laboratories
1106 Board of Trade Chicago, Illinois
"Runyon Analyze Help Sell Feeds"

KELLY-DUPLEX

FULL PROFITS from Custom Grinding and Mixing

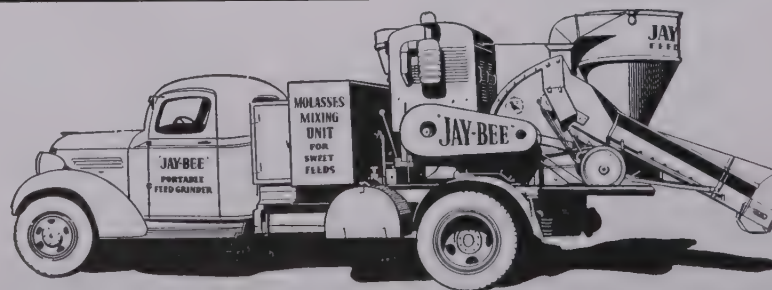
● Kelly-Duplex Mill machinery makes more money for you in custom grinding and mixing by turning out more work in less time at a lower operating cost. The superior results obtained with this equipment guarantees satisfied customers. Reduces repair bills and shut-down time to a minimum.

Write us today for catalog.

The Duplex Mill & Mfg. Co.
SPRINGFIELD, OHIO



Corn Gluten Feed, Corn Oil Cake Meal,
Brewers' Dried Grains Malt Sprouts
ANHEUSER-BUSCH ST. LOUIS



FORTIFY YOUR BUSINESS WITH "JAY BEE" PORTABLE

THE alert stationary custom miller knows that much business is to be had, which does not come to his plant. Go after this business—extra roughage grinding, molasses sales, concentrate sales with the "Jay Bee" Portable Hammer Mill.

The "Jay Bee" Portable is making grinding history, making profits never before thought possible to make. The "Jay Bee" Portable has been the very life-blood of many stationary plants, lifting them out of the rut, and putting them on a profitable basis.

A free demonstration will convince you of "Jay Bee" profit possibilities. Write or wire quick.

J. B. Sedberry, Inc., Dept. 76, Franklin, Tenn.—Utica, N. Y.

John J. Woods & Sons, Jay Bee Sales Co., Kansas City, Mo.
J. B. Sedberry Co., 2608 So. Wells St., Chicago, Ill.—A. E. Thompson Co., 817 Washington Ave. N., Minneapolis, Minn.—Jay Bee Sales Co., 395 Broadway, New York—Jackson, Tenn.—Moultrie, Ga.—Atlanta, Ga.—T. G. Holland, 429 Kathmere Rd., Brookline, Del. Co., Pa.—Jay Bee of Texas, 705 Ross Ave., Dallas, Texas—Jay Bee Sales Company, 436 Starks Bldg., Louisville, Kentucky.

Helps Overcome All Competition

BE prepared to give your customers the service which they want. The "Jay Bee" Hollander Molasses Mixer does a quick, thorough, uniform job, making sweet feeds.

MODERNIZE YOUR PLANT

Stationary mills from 10 H.P. to 200 H.P. with belt, V-belt, and direct-connected drives. Built by the Bossert Co., Inc., Utica, N. Y. Stationary Molasses Mixers, corn crackers, batch mixers. Write for full descriptions, terms, prices, etc.

Ground Soybeans as Dairy Protein

By G. A. WILLIAMS of Purdue University

Thirty per cent of the owners of the high herd in each of Indiana's 62 Dairy Herd Improvement Ass'ns fed their cows soybeans to balance the grain mixture during February.

Protein is one of the most essential constituents of the ration. It is the most costly. Without it, a cow cannot continue to produce large amounts of milk over an extended period of time. Many high producers would not maintain profitable levels of production as long as they do were it not for the fact that they draw on reserves stored in the body. Finally, body supplies fail and low production results.

Ground soybeans is one of our best and cheapest sources of protein-rich concentrates. It is palatable, high in protein, and the oil it contains exerts a beneficial effect on the butterfat content of the milk.

License to Sell Feed in California

On July 1, every person who intends to sell commercial feeds which are regulated under the feed law, must have a license instead of the previous simple registration. All established dealers are inspected regularly, and it is only fair and honest that a person selling processed feeds, shall so establish himself that the state and the public may know: Who is responsible—where the seller may be found—and—where the feeds sold may be sampled and an analysis made.

It is our duty, not to try to keep any persons from entering the feed business, but to demand that any person so engaged shall meet exactly the same requirements in the way of state and local licenses, regulations, taxes, etc.

This Ass'n which sponsored the new license, urges local dealers to make an immediate survey of the feed situation, to file either directly with the Bureau of Field Crops, at Sacramento, or thru our office, the names of any persons selling feeds who do not meet the plain requirements under the new feed license.—California Hay, Grain & Feed Dealers Ass'n.

Feed Prices

The following table shows the closing bid price each week for **October** futures of standard bran and gray shorts, cottonseed meal and spot No. 1 fine ground alfalfa meal, in dollars per ton, and No. 2 yellow corn and No. 2 yellow soybeans in cents per bushel:

Minneapolis Spot				Kansas City			
	Bran	Midss		Bran	Shorts		
May 4.....	24.00	24.00		17.10	21.00		
May 11.....	23.50	23.50		17.60	21.50		
May 18.....	21.50	22.50		15.60	19.00		
May 25.....	20.00	22.00		15.10	19.00		
June 1.....	18.50	21.00		14.50	17.00		
June 8.....	17.00	19.75		14.00	17.25		
June 15.....	17.25	20.50		13.75	17.15		
June 22.....	17.50	22.00		13.95	17.40		
June 29.....	17.00	22.00		13.75	16.85		
July 6.....	16.00	20.50		14.00	17.10		
*St. Louis				Chicago			
	Bran	Shorts		Soybeans	Meal		
May 4.....	20.15	23.15		109¾	27.10		
May 11.....	20.70	23.25		108½	27.50		
May 18.....	18.85	22.00		91	24.50		
May 25.....	18.15	20.90		89½	27.50		
June 1.....	17.50	20.00		85½	22.00		
June 8.....	17.00	19.00		81	22.00		
June 15.....	16.95	19.10		..	21.00		
June 22.....	17.15	19.50		81½	18.00		
June 29.....	17.00	18.75		78¾	..		
July 6.....	17.00	18.80		81¾	17.50		

Cottonseed Meal				Kansas City			
	Ft. Worth	Memphis		Alfalfa	Chicago		
May 4.....	37.00	24.00		22.50	68		
May 11.....	37.00	24.45		21.75	70¾		
May 18.....	37.00	22.00		22.25	65		
May 25.....	37.00	21.15		21.50	69		
June 1.....	37.00	20.35		21.00	65½		
June 8.....	35.00	20.50		..	66¾		
June 15.....	35.00	20.30		20.00	65¼		
June 22.....	33.00	20.25		..	66		
June 29.....	33.00	19.65		19.50	64½		
July 6.....	31.00	20.00		19.00	64		

*St. Louis bran basis Chicago delivery; shorts St. Louis delivery.

Truck Drivers' Hours

Under an order by the Interstate Commerce Commission effective Aug. 1, employees cannot drive longer than ten hours a day and not more than sixty hours in any one week, except that driver salesmen on private vehicles may be on duty any number of hours a week provided the actual driving time does not exceed ten hours a day or fifty hours a week. At least 50 percent of their time, however, must be devoted to selling. All employees would, however, still be subject to the wage provisions of the Fair Labor Standards Act.

The Commission is of the opinion that trucks operating wholly within a state, engaged in the transportation of goods to rail heads, ports or motor carrier stations for further shipment in interstate commerce, come within the jurisdiction of the I.C.C.

Any driver of a private truck used in both interstate and intrastate commerce who devotes any part of his time during a workweek to

transporting goods in interstate commerce would be subject to the jurisdiction of the I.C.C. under the Motor Carrier Act for that workweek.

Business Promotion Campaign of Northwest Dealers

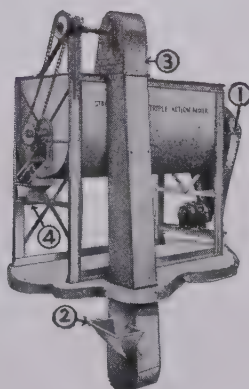
The Northwest Retail Feed Ass'n has worked out a campaign consisting of a six months' program of combination letter-folder mailing pieces which will be sent out to the dealer's list of customers every month during the six months' period.

A preliminary canvass has been made with the result that every dealer approached has contracted for this six months' campaign. Every dealer has been most enthusiastic about the plan.

Dealers interested in promoting their business by this plan will be given full information by addressing W. D. Flemming, sec'y of the N-W Retail Feed Ass'n, Minneapolis.

STRONG-SCOTT

Triple Action Dry Feed Mixer



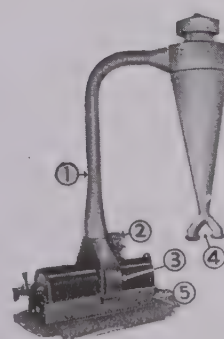
This unit is manufactured in two styles, as shown, and in Short Leg Type with discharge gate in bottom of tub for overhead installation.

This unit does a more thorough job of mixing than others of similar design, yet, requires less horsepower to do it.

Get the full details—Write today.

Pneumatic Attrition Mill

As the ground feed comes from the grinding plates, it is immediately carried away by the air current formed by the fan blades on the runner heads, and blown to the feed collector for sacking. This absolutely eliminates the possibility of a dust explosion occurring from sparks created by some foreign material passing through the grinding plates, because the air currents would give no opportunity for ignition.



Complete details will be sent upon request.

Everything for Every Mill, Elevator
and Feed Plant

The Strong-Scott Mfg Co.

Branch Office: Great Falls, Mont.

Minneapolis Minn.



Poultry Feeds and Feeding

Ground corn cobs make most satisfactory chicken litter

Ithaca, N. Y.—Cornell University, with its outstanding equipment for poultry research, gave an appropriate setting to the 32nd annual meeting of the Poultry Science Ass'n, attended by nearly 300 visitors the week of June 24. Papers were presented by scientists from many states of the Union.

Lancaster, Pa.—John W. Eshelman & Sons have agreed with the Federal Trade Commission to discontinue advertising "Red Rose Laying Mash" as the only feed that will produce or maintain profitable hens; "Red Rose Fattening Mash" as being necessary for obtaining fancy or top-grade broilers.

Chicago, Ill.—Organization of the planning com'te of the poultry industry is proceeding. Chairman D. D. Slade of Lexington, Ky., has named A. G. Philips of Chicago chairman of the com'te on nominations. Candidates for the paid personnel will be recommended by a com'te of which Ralph M. Field, pres. of the American Feed Manufacturers Ass'n, is a member.

In Iowa, which is a leading poultry state, varieties which have been bred for exhibition are losing favor. W. M. Vernon, extension poultryman at Iowa State College predicts that within 5 years 90 per cent of the chickens in Iowa would be composed of White Rocks, White Leghorns, New Hampshires, and Barred Rocks. These four varieties top the list at present, with White Rocks leading the field. Over 30 per cent of the chickens in the state are of this variety. Leghorns are second with 28 per cent, while New Hampshires and Barred Rocks take the second and third places, respectively. These figures are based on reports from 50 hatcheries in Iowa.

Atlanta, Ga.—The Jones Advertising Agency has agreed with the Federal Trade Commission to cease representing that any of the feeding plans or feeds of J. Kendley Martin, or any ingredients in such feed, will "insure" or "assure" for the user any result which may not be expected to follow under every condition of use or which is not entirely dependent on such feeding plan, feed, or ingredients in the feed, for its accomplishment; that any of the hog feeds sold by Martin will afford the highest profit or grow and develop swine at the lowest feeding cost, or that the various feeds distributed by J. Kendley Martin are sold entirely direct to the purchasing public.

Corn Gluten Meal for Poultry

In a series of experiments utilizing corn gluten meal in the rations of growing chicks and laying hens as reported in Cornell Station Bulletin 725 it was found that protein combinations of good quality could be obtained in rations containing this feeding stuff by including a limited quantity of some material rich in lysine, such as milk or meat-scrap protein, or both.

Nitrogen-balance experiments indicated that meat scrap or milk protein exerted a marked supplementary effect upon the proteins contained in a basal ration composed chiefly of yellow corn meal, wheat flour middlings, and corn gluten meal. Additional proteins from wheat byproducts or ground oats had practically no supplementary effect on the protein in this basal ration, altho they did exert a growth-stimulating effect.

In a ration in which from 38 to 44 per cent of the total protein was from corn (largely from corn gluten meal) the inclusion of 20 per cent animal protein supported excellent growth in chicks. With laying hens as good egg production was obtained on a ration containing both corn gluten meal and meat scrap

protein as on one containing only meat scrap. The former was too low in vitamin G for optimum hatchability, but this deficiency was readily corrected by adding a small amount of milk products or alfalfa meal to the ration.

Oat Hulls to Prevent Cannibalism

The Department of Poultry Husbandry of Western Washington Experiment Station reports that oat hull fiber obtained by dilute acid digestion of oat hulls, when fed at a level sufficient to produce a ration of 11 per cent fiber, was found to control cannibalism and to improve the quality of the feathers in feeding trials involving duplicate lots of 64 White Leghorn pullets each from 2 to 40 weeks of age.

The oat hull was equally effective but two of its other fractions, namely, the ash of the dilute acid extract and the water extract, were of little value in preventing cannibalism under the conditions of this experiment.

Calcium for Laying Hens?

Grain and Feed Journals: I would appreciate it if the Journal could give me information on the feeding of calcium to laying hens, as suggested by an article in the Journal some time ago.—A. C. Cooper, Greencastle, Ind.

Ans.: Hens need more calcium than is contained in corn just for maintenance. When laying they need much more. Egg shells contain 93.71% calcium carbonate.

A flock of 400 laying hens require 4 grams of dietary calcium per 100 grams of net protein used for maintenance, needing 26.2 grams daily for maintenance. Adding the amount of calcium contained in the eggs increases the requirement to 800 grams daily for the flock, if only about one-half of the amount fed is utilized.

Limestone is a good source of calcium carbonate but oyster shells are preferred by poultrymen. They contain 96% calcium carbonate. One pound of oyster shell contains enough lime for 7 to 8 dozen eggs. The shell can be fed in powdered form in the mash. Also to make

sure the layers are getting enough they should have access to hoppers containing shell crushed to a suitable size from which to satisfy their cravings.

When the regular ration contains bone meal, steamed bone meal, ground limestone or oyster shell the amount of supplementary calcium car-

Guaranteed
for
carotene content

Dated
for freshness



FERNANDO VALLEY MILLING
& SUPPLY COMPANY
VAN NUYS, CALIFORNIA



The First One Unit Soy Bean Processing Plant Built. This 6,000 bushel country grain elevator was converted into a busy, single-expeller unit (expanded since to two expellers) by building a two-story addition to house the soybean processing machinery.

Engineering, rebuilding, and machinery by

NEWELL CONSTRUCTION & MACHINERY COMPANY
CEDAR RAPIDS, IOWA

Experienced builders of soybean processing plants of all sizes.
Write for full information.

CONVERTED
by
NEWELL

Ralph Wells & Co.
Monmouth, Ill.

bonate to be supplied is less. If these are included in the ration their amount should not exceed one and one-half per cent of the ration.

Experiments on Growing Turkeys

By D. C. KENNARD and V. D. CHAMBERLIN
of Ohio Exp. Station

To secure first-hand information and experience with turkeys, the Ohio Experiment Station started with 200 turkey poults (100 Bronze and 100 Narragansetts) in 1938 and 400 White Holland poults in 1939.

The first adverse experience was a digestive disorder caused by the coarseness of the 10 per cent of ground oats in the ration. After the ground oats were omitted the trouble promptly disappeared. No warning or precautions on this point had been found in the turkey literature read. From this experience, at the cost of 15 to 20 poults lost, it was learned that a better and safer procedure was to use no ground oats in the starter, and that after 6 weeks the poults could be safely given all the whole oats they would eat by keeping the whole oats before them at all times in separate feeders.

There was no significant difference in the rate of growth of the range and confined birds nor was there a noticeable difference in their quality. The total feed consumption was as might be expected, less for the range birds and more for those confined. That the indoor birds were by necessity less active and not exposed to outdoor weather conditions may explain their lessened feed requirement as compared with birds confined to the sun porches. The average results of the two indoor groups, one which received cod-liver oil and the other which was exposed to ultraviolet light, make interesting comparisons with the outdoor range and colony house groups.

Altho the feed requirement per bird was less on range, the pounds of feed per pound of live weight and the cost of feed per pound of live weight sold were slightly greater because of the greater loss of range birds. When the loss of range birds, 26 out of a total of 144, or 18 per cent, and the extra time and labor involved are considered, both confinement procedures proved more economical and yielded better returns than the range.

RATION AND METHOD OF FEEDING.—The ration (after eliminating the ground oats from the starter the first year) was the same for both years. Since the ration proved satisfactory and gave the desired rate of growth for confined as well as for range birds, it is planned to use the same ration the third year. For those not having a preferable ration and method of feeding it should prove satisfactory.

Formula for 24 per cent protein turkey starter during the first 8 weeks

	Pounds
Coarse ground yellow corn.....	30.0
Wheat bran.....	10.0
Wheat middlings.....	12.5
Alfalfa leaf meal.....	7.5
Dried milk.....	7.5
Meat scraps.....	15.0
Soybean oil meal.....	12.5
Salt.....	1.0
Chick-size oyster shells.....	2.0
Chick-size granite grit.....	2.0
Cod-liver oil, 400 units of vitamin D per gram.....	1

Method of feeding.—Fresh mash should be fed three times daily in the amount that will be about consumed before the next feeding period.

After 6 weeks, whole oats are to be fed daily in the morning on top of the mash in the amount that will be consumed within 3 or 4 hours, or the whole oats may be kept in separate feeders before the birds at all times. This separate or special feeding of whole oats is to be discontinued when the turkeys are transferred to the whole oats—mash growing ration.

Whole oats—mash 20 per cent protein growing ration after 8 weeks

	Pounds
Whole oats.....	30
Coarsely ground corn.....	24
Wheat bran.....	15
Wheat middlings.....	15
Alfalfa leaf meal.....	8
Meat scraps.....	7
Dried skimmilk.....	4
Soybean oil meal.....	12
Salt.....	1
Bone meal.....	2
Granite grit, hen size.....	2
Oyster shells, hen size.....	2

Method of feeding.—Oyster shells, hen size, and granite or hard grit, hen size, should be kept before the turkeys at all times after the first 6 weeks.

Whole corn is to be kept before the birds at all times after 8 weeks.

Fish oil or other sources of vitamin D are to be omitted when the turkeys are on range or confined to wire sun porches.

Turkeys confined indoors should receive 1 per cent of fortified fish oil containing 400 units of vitamin D per gram of oil or its equivalent in the whole oats—mash mixture. The fish oil is to be omitted 6 to 7 weeks before turkeys are to be dressed for market to avoid fishy flavor of the meat. This is extremely important; no chances should be taken to the contrary.

FLAVOR OF MEAT AS AFFECTED BY COD-LIVER OIL.—The average intake of cod-liver oil by the one group just before discontinuing the oil November 16 averaged 1 per cent of the total feed. A representative turkey tom was selected at the time the cod-liver oil was discontinued and again at periods of 2 and 4 weeks afterward.

When the first bird was roasted there was a strong odor of cod-liver oil, and the flavor of the meat was fishy. The bird selected 2 weeks after omission of the cod-liver oil yielded a distinct odor of cod-liver oil during the roasting period, and some of the flesh was mildly tainted with a fishy flavor. The third bird, selected 4 weeks after discontinuation of the oil, yielded no odor of cod-liver oil during the roasting period, and the meat was untainted by fishy flavor.

As a result, the 4-week interval without cod-liver oil in the feed was considered the minimum period for safety. As a general suggestion, the period between discontinuation of the cod-liver oil and dressing for market should be 6 to 7 weeks long. Much the same precaution should be taken if fish meal is used in the ration, and possibly a longer period of time will be needed if the amount of fish meal used in the mash exceeds 5 per cent.

A Grain Grading School was held on the floor of the Kansas City Board of Trade June 2 attended by 265 millers and grain men from 5 states with 28 licensed inspectors as instructors, in charge of Willis Combs of Chicago for the U.S.D.A. Speakers included Roy Swenson, first vice-pres. of the Board of Trade; A. L. Clapp, sec'y, Kansas Crop Improvement Ass'n; and E. G. Kelly, extension entomologist of Kansas State College. A luncheon at the Hotel Continental, presided over by G. A. Johnson, second vice-pres. of the exchange, was provided the guests.

Feeds Not Poisonous

Edward F. Gerrity, superintendent of the division of foods and dairies of the Illinois Department of Agriculture, writes R. M. Field, pres. of the American Feed Mfrs. Assn.:

"Regarding the death of stock alleged to be due to poisonous qualities of the feed, our experience has been much the same as that reported by other states.

"We found one case where molasses had been packed in an old paint barrel containing enough paint to cause the death of any animal eating the molasses. We had one or two cases where poison was deliberately mixed with feeds for malicious reasons. Of course we have had numerous reports and complaints that various feeds caused the illness and death of poultry and stock. In no instance were we able to prove that the feed as purchased had been the cause of the trouble. Most of the time, however, we could not be sure what caused the trouble because of the fact that the original feed had been entirely used up.

"Our conclusion is that feed as manufactured by reputable firms thruout the United States is a safe product to be purchased and used by the average farmer or feeder."

Triple XXX Alfalfa Meal

Use more of it—it's healthful



THE DENVER ALFALFA
MILLING & PRODUCTS CO.

Merchants Exchange
ST. LOUIS

LAMAR, COLO.

CHICKENS TURKEYS

Their Feed and Care

Helping your farmer patrons to increase their profits from their flocks will also increase your business. These authoritative books will aid you when advising them.

POULTRY PRODUCTION—Lippincott and Card

A book complete with information needed in the successful raising of poultry. Newly revised. 603 pages, 215 illustrations. Weight 4 lbs., price \$4.00 plus postage.

PRACTICAL POULTRY FARMING—Hurd

Revised and enlarged edition, up-to-date. Contains all important discoveries in poultry production made in recent years. 480 pages, 200 illustrations. Weight 2 lbs. Price \$2.50 plus postage.

POULTRY HUSBANDRY—Jull

Contains a background of the poultry industry, the fundamental principles involved in various poultry practices, and important economic factors in producing and marketing poultry products. 548 pages, 167 illustrations. Weight 3 lbs, price \$4.00 plus postage.

TURKEY MANAGEMENT—Marsden and Martin

Because of the recognized ability of the authors, this, the first complete, non-technical treatise on turkey production should prove of great value to both large and small producers. 708 pages, 17 chapters, appendix and thorough index, 120 illustrations. Weight 3 lbs, price \$3.50 plus postage.

Nothing is more productive of profit than healthy poultry. These books will aid you in encouraging your patrons to raise the better types. Order them today.

Grain & Feed Journals

Consolidated

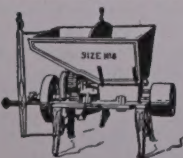
332 S. La Salle St.

Chicago, Ill.

BOWSHER Crush Feed Mills Grind Mix

Rapidly crush ear corn (with or without husk) and grind all the small grains; either separately or mixed—mixed as they are being ground — not before or after. This saves time and labor.

"COMBINATION" MILLS



Use the famous Cone-Shape burrs. Light Draft. Large Capacity. Solidly Built. Long Life. Special sizes for the milling trade. Backing or Wagon Box Elevator. Circular on request.

THE N. P. BOWSHER CO.

SOUTH BEND

INDIANA

Vitamin Needs of Sheep

By W. E. KRAUSS, Ohio Agri. Exp. Sta., before American Society of Animal Production.

As in the case of horses, knowledge regarding the requirements of sheep for the various vitamins is meager. That vitamin D is needed by sheep was established some time ago, but the actual requirement for this factor must be low since it has been possible to use successfully corn silage as the only roughage in the winter ration of pregnant and nursing ewes.

Based upon work with other ruminants, it has been assumed that sheep require vitamin A. As in the case of D, the requirement for A would seem to be low since no improvement in performance was noted last winter at the Ohio Experiment Station in ewes fed up to 20,000 units of vitamin A daily as carotene over and above the amount present in the basal control group ration which contained ordinary winter farm feeds. This is in keeping with the California experiments which showed that adult ewes have a large enough storage of vitamin A to carry them along for a period of five months, including the breeding season, on a restricted vitamin A ration without adversely affecting fertility. Even ewe lambs that were seriously depleted of vitamin A at breeding time had creditable conception records, but gestation was unsuccessful. The possibility of some other factor being associated with fertility in sheep must not be overlooked, as indicated by the following information supplied by Dr. B. H. Thomas of Iowa State College:

SHEEP NEED MORE VITAMIN E.—"Data obtained in a preliminary study with sheep indicate that their requirements for vitamin E are greater than those of goats. Five ewes which had been limited to the same vitamin E-deficient ration as had been fed to the goats, failed to lamb any live young, whereas the reproduction of goats was unaffected.

"Whether or not the lamb crop of ewes fed practical rations can be increased by supplementation with concentrates of vitamin E is not known definitely. With this in mind steps were taken to obtain data of a preliminary nature. A flock of approximately 20 breeding ewes of proven fertility was divided into two reasonably uniform groups. Wheat germ oil was administered to one group weekly for two months by capsule. Otherwise both groups were handled identically thruout the breeding and lambing season.

"It is interesting to note that the percentage of lamb crop was larger for the group which had received wheat germ oil. It should be borne in mind, however, that these data are insufficient to warrant drawing definite conclusions. This

project is being expanded to include larger numbers of sheep."

That water-soluble factors play little role in this species was shown by McElroy and Goss of California and will be referred to later. Likewise, Pearson of Texas was able to grow lambs growth and produced pellagra-like symptoms in normally on a ration that caused cessation of dogs, showing that either nicotinic acid is not a dietary essential for this species or else the requirement for this factor is lower than for other species.

Texas Feed Problems

W. R. Archer of Houston, pres. of the Texas Feed Mfrs. Ass'n, in his address to members at the recent annual meeting, touched on some problems affecting the industry. He said:

I think the organization should maintain a com'tee to supervise, investigate and carry out a program that has been adopted and agreed to by all. We are all familiar with some of the present objectionable things being done to secure business during past years. For example, unreasonable bookings, as to time, bookings with guaranties against declines, bookings subject to cancellation, bookings accepted without even the buyer's signature to the booking, dummy bookings made by the salesman for the benefit of the buyers after an advance, and many others familiar to most of you.

These practices are an outgrowth of too much eagerness on the part of our salesmen for business, trying to outdo at all times, competition. With these practices go the loss of respect on the part of the buyer, for the firms who are small enough—altho big in size—to resort to these methods of securing an order.

I feel it necessary to call to your attention the activities of the cotton seed oil mills now actively engaged in the mixed feed business. These mills, in the past, looked to the feed manufacturers for their outlet of meal, meat scraps and other byproducts. Their activities as feed manufacturers necessitate our considering seriously our future source of supply of these materials. Thank goodness, some have been wise enough to stick to their own knitting.

I wish also to make some mention of the Texas Poultry Federation. This poultry movement got away to a beautiful start, but apparently has lost its momentum because of the inability of those interested to devote any time to it. I think that the feed manufacturers are entitled to have a detailed itemized statement of the distribution of the funds contributed by the organization to the Poultry Federation. I further feel that the officers in charge of this Federation should pass on to the feed manufacturers a report of their activities in the past and their program for the future. The feed manufactur-

ing business needs to develop the poultry industry in Texas and should co-operate in any movement. There is room for more poultry in Texas. Some action should be taken in the interest of this.

Feed manufacturers should strive to get the surplus funds from the sale of tags diverted to needed research work, or request a reduction in the cost of tags.

N. E. Feed Manufacturers Elect

The Northeastern States Feed Manufacturers Ass'n meeting at the Arlington Hotel, Binghamton, N. Y., June 28, elected the following officers: Pres., E. J. Koehlein, Buffalo, N. Y.; 1st vice pres., Arthur Hopkins, Boston, Mass.; 2nd vice pres., P. Chichester, Frederick, Md., and sec'y-treas., Bruce Conover, Buffalo, N. Y. Directors are the foregoing and Lloyd Hedrick, Buffalo; Lloyd Riford, Cayuga, N. Y., and W. S. Young, Waverly, N. Y.

A round table discussion of feed manufacturers' problems was conducted.

Substitutes for Corn in Pig Feed

At the Ohio Experiment Station 42 trials were conducted comparing the value of 9 different feeding stuffs as complete substitutes for corn and of 34 trials comparing 12 different feeding stuffs as partial substitutes for corn in the ration of growing and fattenings pigs.

With shelled corn having a value of 100, values of the various complete substitutes for corn were ground barley 100.3, corn meal 69.5, white hominy feed of 107.2, ground oats 78.7, hulled oats 135.8, ground rye 93.9, ground wheat 107.6, flour wheat middlings 102, and standard wheat middlings 90.2.

Feeds ranking especially high as partial substitutes for corn included corn germ meal, corn oil meal, hulled oats, oat middlings, and rice polish, while other feeds high in this regard are coconut oil meal and wheat flour middlings. Certain feeds, particularly corn oil meal, had a high corn replacement value when fed in limited quantity but much lower value when used to replace a higher percentage of corn.—Ohio St. Bul. 607.

Water-Power Elevator and Feed Mill

Since 1865 when the good water power invited Cyrus Hine to build a mill at Pigeon Falls, Wis., two mills have burned on the site, the last early in 1940.

A large investment was made in constructing the permanent concrete dam in 1930, and the ownership has passed in turn to Peder Ekern, his son-in-law, B. M. Sletteland, whose son, Ernest Sletteland, now continues the business under the old name of P. Ekern Co.

Power is developed by two water wheels, one water wheel connected direct to a Prater 60-h.p. hammer mill, while the other water wheel operates the remainder of the machinery.

The building is 30x50 ft., with an elevator 44 ft. high, topped by a dust collector. In the head house are 8 hopper bottom storage bins with an aggregate capacity of 2,500 bus.

Attached to the elevator is a large warehouse and a feed mill, all covered with steel and painted a silver white that presents a handsome appearance. The grinding room is 14x30 ft., and the storage room 30x36 ft. The whole plant was painted with white enamel inside.

Grain is weighed on the 10-ton scale which was not damaged by the fire, and handled over the loading platform into the elevator. After elevation the grain is spouted either to storage or processing bins.

The equipment, in addition to the Prater Mill, comprises a Prater Mixer of one ton capacity, cleaner, two elevator legs and a corn sheller fitted with drags. The plant was designed and erected by the T. E. Ibberson Co.

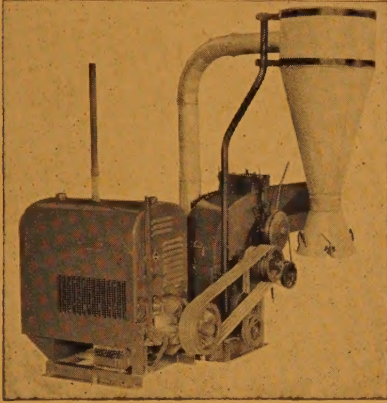


The P. Ekern Co.'s Feed Mill at Pigeon Falls, Wis.

GRAIN & FEED JOURNALS Consolidated

Hammer Mills for Varied Requirements

Two new sizes of hammer mills of which there are four models have been made available to feed stores, farms and elevators by Fairbanks, Morse & Co., and will be known as the No. 450 and 710 and are for use with 20-h.p. electric motors, 3-4 plow tractors or 50-h.p. power units. They are designed to grind 2,000 pounds of fine oats to 12,000 pounds of ear



Hammer Mill and Power Unit

corn per hour, at a cost of $4\frac{1}{2}$ to 6 gallons of gasoline per hour.

With the standard C-40 Fairbanks-Morse power unit as shown in the illustration, this makes a most convenient "package grinding unit."

The plain tray models are available in both the 450 and 710 sizes and require hand feeding, usually by two operators, unless feed is direct from bin and can be accurately regulated.

The traveling table models are also available in both sizes and are recommended because of convenience of the improved feeding equipment. The traveling feed tables are equipped with two speeds, a slow speed for fine and heavy or hard grinds, or a fast speed for easy and bulky grinds.

Among the many other features in these new mills are included "Y" type hammers which are reversible for service and are extremely heavy for more hours of life and collector mountings for either side of the mill; auger and blower shaft mounted on adjustable Timken Bearings; over-size V-belts to give longer life; pivot table drive fully adjustable to eliminate the removing of belt to change screens; two-speed tables as mentioned; manual table release with finger-tip control which stops the conveyor instantly and a mixer attachment for dry concentrate.

Cattle Fattening Rations

During a 9-year period the Oklahoma Exp. Station made a series of beef cattle feeding trials.

It was found that approximately 1.5 lb. of 43 per cent cottonseed meal per steer daily supplied an adequate amount of protein in this ration, but that the feeding of 2.5 lbs. of meal improved the bloom of the finished steers. Substituting cottonseed meal for corn after the protein requirements are met proved profitable only when the meal sold for considerably less per ton than corn.

The addition of 0.17 lbs. of ground limestone per steer to the daily ration improved both the rate and economy of gain, but had little influence on dressing percentage or shrinkage in marketing.

With alfalfa hay as a roughage, substituting cottonseed meal for corn up to one-third of the concentrate ration did not significantly influence the rate of gain, and the meal was approximately equal to corn pound for pound.

Darso in either form proved highly palatable. However, steers receiving the ground threshed darso made 12 per cent less daily gain and consumed 6.7 per cent more concentrates per day and those receiving the ground darso heads gained 20 per cent less and consumed 9.4 per cent more concentrates daily than the cornfed steers.

Dry Milk and Egg Production

By Dr. RAYMOND T. PARKHURST, Massachusetts State College.

Dr. E. W. Henderson studied the influence of eight different protein supplements on the egg production of White Leghorn pullets and hens at the Iowa State College. He also used the all mash method of feeding and also allowed oyster shell and grit free choice. The eight supplements in the three groups were: 1, dried milk (3 levels, 15, 10 and 5 per cent); 2, meat and bone meal (2 levels, 10 and 5 per cent); and 3, (3 combinations of dried milk and meat and bone meal, 5 and 5, 9 and 5, 5 and 8 per cent).

The results of Dr. Henderson's work have been published in *Poultry Science* and can be summarized by a statement from that publication as follows: "On the basis of average number of eggs per hen for 11 months the groups ranked as follows: 'Milk' 152 eggs, 'combinations' 139 eggs, and 'meat and bone meal' 121 eggs. On the basis of percentage of production per hen days the groups ranked as follows: Milk, 45 per cent; combination, 42 per cent, and meat and bone meal, 37 per cent."

From their extensive studies, Dr. R. M. Bethke and Professor D. C. Kennard of the Ohio Agricultural Experiment Station observed in a recent Ohio Bi-monthly Bulletin that liquid, condensed, and dried milk by-products have nutritive value not in meatscraps, most fish meals, or soybean oil meal, and conclude, "For best results, regardless of whether it contains meat scraps, fish meal, or soybean oil meal, a ration for confined chickens should contain, on a basis of total feed, not less than 2.5 per cent of a dried milk and 5 per cent of high vitamin legume meal."

During the past year, a report, Bulletin No. 381, has been issued from the Pennsylvania State College. Replacing the protein of meatscraps and fish meal with that from 2.5 to 5 per cent

dried skim milk gave approximately 7 per cent more eggs for the year, equivalent to about 10 eggs per pullet per year. As a result of their three-year test, the authors make the following conclusion: "From the standpoint of egg production, egg weight, hatchability and dry skim-milk intake, most efficient performance by laying pullets occurred with all-mash rations containing 2.5 to 5 per cent milk."

Grain Contracts with Farmers

Form 10 D. C. is recognized as the best for contracting grain and seed from farmers, and is in extensive use by grain dealers. Do not take chances with verbal contracts. They lead to misunderstandings, differences and disputes, as well as loss of profits and customers. Contract certifies that farmer:

"has sold.....bushels of.....at..... cents per bushel, to grade No....., to be delivered at.....on or before....." It also certifies that, "if inferior grain is delivered, the market difference at which such grain is selling on day of delivery shall be deducted. Any extension of time at buyer's option."

Originals are printed on bond paper, machine perforated so they may be easily removed; duplicates are of manila. All have spaces ruled on the back for recording each load delivered on the contract. Check bound, size $5\frac{1}{2} \times 8\frac{3}{4}$ inches, 100 sets numbered in duplicate and supplied with 4 sheets of carbon paper. Order Form 10 DC Improved. Price \$1.10, f. o. b. Chicago. Wt. 1 lb.

Triplicating book is same as 10 DC and contains 100 additional copies of the contract printed on strong tissue and 4 sheets of dual faced carbon. Order Form 10 TC. Price \$1.35, f. o. b. Chicago. Weight, 21 ozs.

Grain & Feed Journals

Consolidated

332 So. La Salle St. Chicago, Ill.

Scale and Credit Tickets

Form 51 Duplicating contains 100 leaves of white bond paper, each leaf bearing five tickets like one illustrated herewith, machine perforated for easy removal, and 100 leaves of yellow post office paper, each leaf bearing five duplicates which remain in the book. Also 4 sheets of No. 1 carbon. Size of book $5\frac{1}{2} \times 13\frac{3}{4}$ inches, check bound, well printed. Each leaf is one ticket wide and five tickets deep.

Order 51 Duplicating 500 tickets. Price, \$1.00, plus postage. Weight, $1\frac{3}{4}$ lbs.

Cash with order for twelve books earns 10% discount.

Send all orders to

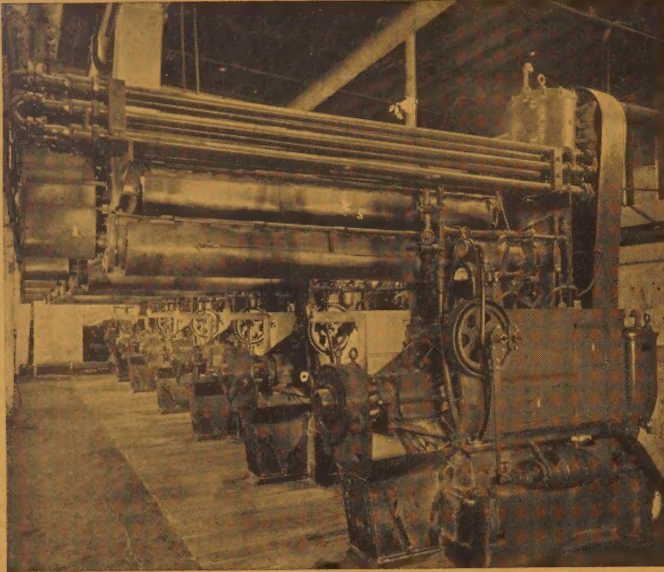
Grain & Feed Journals Consolidated

332 So. La Salle St., Chicago, Ill.

No.	_____ 19____		
Load of	_____		
From	_____		
To	_____		
Gross	_____ lbs.	\$ _____	100 Due to
Tare	_____ lbs.	_____ or Order.	
Net	_____ lbs.		
Net	_____ bus.	_____ lbs.	_____ Weigher.

(Three-Fourths Actual Size)

EXPELLER SOYBEAN OIL MEAL



IS PRODUCED *only* IN EXPELLERS

When considering the installation of equipment for processing soybeans, remember that Expeller "nut-like" soybean oil meal with its advantages over other oil meals can be produced only in an Expeller.

Anderson Super-Duo Expellers for pressing soybeans handle 600 to 700 bushels of soybeans in 24 hours. The cake is $\frac{1}{4}$ to $\frac{5}{16}$ inch thick instead of in thin chips. It will contain 4 to $4\frac{1}{2}\%$ oil content on a 10% moisture basis, is lighter in color and has $\frac{1}{2}$ to 1% less oil. The oil also is lighter in color, being from 22 to 25 red instead of from 30 to 50 red. This oil has a greater market value. The cake has that "nut-like" flavor and aroma so highly prized by feed mixers.

The above points explain why more soybeans are processed by Expellers than by all other presses combined. Write and let us give you complete information on the Anderson Super-Duo Expeller.

THE V. D. ANDERSON CO.
1956 W. 96th Street • Cleveland, Ohio

Anderson **EXPELLER**



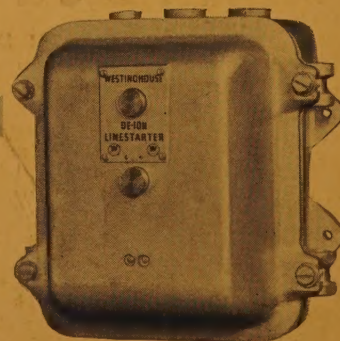
He knows his business!

• The Westinghouse serviceman gives you action and results, because he knows "what to do about it" whenever your elevators or mill need electrical repairs. Factory training plus practical experience have made him expert at repairing anything electrical from power source to motors and control.

He will give you "on the spot" service for light repairs. And for more extensive work he will remove the unit to a Westinghouse Service Shop . . . a modern, well-equipped plant with parts quickly available to save you expensive shutdowns. There are 37 of these shops conveniently located throughout the country.

Call the Westinghouse office nearest you for dependable electrical repairs . . . ready to serve you day or night.

WESTINGHOUSE ELECTRIC & MFG. CO.
EAST PITTSBURGH, PA.



**WESTINGHOUSE
LINESTARTER** — Magnetic Motor Starter. Approved by the Underwriters' Laboratories, Inc., for hazardous locations where grain dust is prevalent. (Class II Group G locations.)

J-94293

Westinghouse
ELECTRICAL PARTNER OF INDUSTRY

